S. Hrg. 99-865

THE QUALITY OF THE NATION'S ECONOMIC STATISTICS

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

NINETY-NINTH CONGRESS

SECOND SESSION

MARCH 17 AND APRIL 17, 1986

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE
61-143 O WASHINGTON : 1986

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

J 841-4

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THE QUALITY OF THE NATION'S ECONOMIC STATISTICS

MONDAY, MARCH 17, 1986

Congress of the United States,
Joint Economic Committee,
Washington, DC.

The committee met, pursuant to notice, at 10:10 a.m, in room SD-628, Dirksen Senate Office Building, Hon. Paul S. Sarbanes (member of the committee) presiding.

Present: Senators Sarbanes and Proxmire.

OPENING STATEMENT OF SENATOR SARBANES, PRESIDING

Senator Sarbanes. This morning the Joint Economic Committee meets to hear testimony on the quality of the Nation's economic statistics.

The purpose of the hearing, in the first instance, is to explore in some detail the questions raised in the newly released study prepared for the Joint Economic Committee by Ms. Courtenay Slater entitled "Opportunities for Improving Economic Statistics."

In the broader sense, however, the hearing is a response to a widespread and growing concern that our capacity to provide the statistical information on which sound judgment depends in both the private and public sectors is increasingly at risk, and is being placed at risk by stringent reductions.

Spending on all U.S. statistics programs accounts for less than two-tenths of 1 percent of the Federal budget. What constitutes very minor savings in terms of the Federal budget can have a crippling effect on the vital statistical programs we already have, and may make it impossible to develop the new programs we need to keep pace with our rapidly changing economy.

It probably bears noting at the outset of this hearing that full and reliable statistical information does not, in itself, constitute or dictate sound policy; there is no substitute for sound judgment in making policy, whether in the public or private sector.

By the same token, however, the quality of our statistical data is a vital factor in making sound judgments possible. Good statistics do not guarantee good policies, but they are part of the framework of decisionmaking which makes good policies more likely.

Questions about the accuracy and adequacy of our statistics have arisen with increasing frequency over the past year, and they have been expressed in no uncertain terms in a range of national publications.

I would like to cite several examples which will be included in their entity in the hearing record, and setting an example, which I hope the witnesses will follow, I will abridge my opening statement in providing these examples and include the entire opening statement in the hearing record.

Writing in Industry Week in July 1985 John McLenahen notes that vital public policy decisions are—

> Based on data that are sometimes incomplete or misleading—or not just there at all.
>
> Restoring some of the millions cut from Federal agency budgets for data gathering and analysis would help. We need to know more precisely the effects of airline deregulation on the economy. We need retail sales data that better reflect the discount store boom. It would be nice once again to have detailed figures on consumer credit.

In early January, writing in the New York Times, Clyde Farnsworth notes, and that was in an article entitled "The Science (Ha!) of Quality Statistics":

> Nowhere has the problem of the quality statistics been more at issue than in the monthly reporting of imports and exports by the Commerce Department, on the basis of data from the Customs Bureau.
>
> The situation has become so serious that Commerce since August has appended what is in effect a consumer warning on each monthly package of trade numbers that it issues.
>
> The warning is described in statistical jargon as the "carry-over rate," designating the portion of one month's imports that did not enter the country in that month. The rate for November was 34 precent.

Writing in the January 1986 edition of the Wall Street Journal, Paul Blustein declared:

> The rapidly changing U.S. economy is becoming more service oriented, computerized and internationalized, but the nation's economic statistics aren't keeping pace. As a result, critics say the government's measurements frequently give a distorted picture of the economy's health.
>
> Budgetary constraints have forced statistical agencies like BLS to forgo research and postpone many steps that critics say are needed to impr e economic data.

And then in the fall of last year Robert Samuelson, writing in the Washington Post, said:

> Throughout the government, there has been a nibbling away at the statistics we collect to show our social and economic condition.
>
> To be sure, these are austere times; and some information is available from private sources. But, mostly, these cutbacks are shortsighted and abandon government's legitimate functions. Good political decisions are hardly guaranteed by good information, but they are even less likely with bad information.

And, finally, as an example, the Washington Post wrote an editorial, dated December 23, 1985, criticizing the administration for, in the editorial's phrase:

> Saving pennies and squandering dollars for the government, in the name of cost cutting, paperwork reduction, and privatization, to starve the statistical agencies and choke off the flow of federal statistics from the government agencies to the people.

That, in fact, provoked a letter to the Washington Post from Wendy Gramm in the Office of Management and Budget, who is the Administrator for Information and Regulatory Affairs, and we expect to have her testify on this subject sometime after the recess, which will be taking place shortly, and we intend to probe then into the assertion made in her letter that in fact the statistical gathering agencies of the Government have not suffered cuts in resources.

All of these concerns were summed up in the Annual Report of the Joint Economic Committee published just last week. The report notes that our capacity to collect and analyze data plays a critical role in economic forecasting and that, and I quote:

> It is fast becoming apparent that our basic data is not up to the demands of our more sophisticated analytical techniques.

In the committee's judgment:

> The quality of federal economic statistics has been slipping dramatically in recent years. Federal agencies are not collecting as much data as they have in the past and economists fear that a shortage of reliable consistent data may result.

A highly respected Commissioner of the Bureau of Labor Statistics, Ms. Janet Norwood, in a recent comment on sharp budget cuts said, and I quote:

> As both a producer and a consumer of federal statistics, I have found some of these extremely painful. The cuts have eliminated or sharply reduced a number of very useful statistical series.

It is worth noting, in this regard, that the Japanese attach great importance to their national statistics programs. The first Japanese statistics go back little more than 100 years and Japan's modern statistics programs were established after 1945. By contrast, the first U.S. census was taken in 1790.

But Japan today has a national statistics law that holds a month-long national celebration in honor of statistics, of which the theme last year was "Statistics are the beacon for our happy life." [Laughter.]

In the course of this and subsequent hearings leading authorities will discuss the concerns already outlined.

Our first witness this morning is Ms. Courtenay Slater, president of CEC Associates, an economic consulting firm, and from 1977 to 1981 a Chief Economist with the U.S. Department of Commerce. From 1969 to 1977 Ms. Slater was assistant director of the Joint Economic Committee, and it is a pleasure to welcome her back today to discuss the highlights of her study, "Opportunities for Improving Economic Statistics," a bipartisan report just released by the committee.

Following Ms. Slater's testimony, we will hear from a panel consisting of Ms. Katherine Wallman, executive director of the Council of Professional Associations on Federal Statistics, and Mr. Joseph Duncan, a corporate economist and chief statistician for Dun & Bradstreet and the chairman of the committee on statistics of the National Association of Business Economists.

Ms. Slater, is it a pleasure to have you rejoin the committee this morning in a somewhat different capacity. We are looking forward to hearing from you, but first I will defer to Senator Proxmire.

[The written opening statement of Senator Sarbanes follows:]

WRITTEN OPENING STATEMENT OF SENATOR SARBANES

Today the Joint Economic Committee meets to hear testimony on the quality of the nation's economic statistics. The purpose of the hearing, in the first instance, is to explore in some detail the questions raised in the newly released study prepared for the Joint Economic Committee by Dr. Courtenay Slater, entitled "Opportunities for Improving Economic Statistics."

In the broader sense, however, the hearing is a response to a widespread and growing concern that our capacity to provide the statistical information on which sound judgement depends in both the private and public sectors is increasingly at risk, and is being placed at risk by stringent budget reductions. Spending on all U.S. statistics programs accounts for less than 0.2 percent of the federal budget. What constitutes very minor savings in terms of the federal budget can have a crippling effect on the vital statistical programs we already have, and may make it impossible to develop the new programs we need to keep pace with our rapidly changing economy.

It bears repeating at the outset of this hearing that full and reliable statistical information does not, in itself, constitute or dictate sound policy; there is no substitute for sound judgement in making sound policy, whether in the public or private sector. By the same token, however, the quality of our statistical data is a vital factor in making sound judgements possible. Good statistics do not guarantee good policies, but they are part of the framework of decision-making which make good policies more likely.

Questions about the accuracy and adequacy of our statistics have arisen with increasing frequency over the past year, and they have been expressed in no uncertain terms in a range of national publications. I would like to cite several examples, which will be included in their entirety in the hearing record:

Example #1. Writing in the July 8, 1985, issue of *Industry Week*, John S. McLenahen notes that vital public policy decisions are "based on data that are sometimes incomplete or misleading -- or just not there at all."

Mr. McLenahen continues:

"Can't we as a country do a whole lot better?

"The answer, most likely, is 'Yes.'

"Restoring some of the millions cut from federal-agency budgets for data-gathering and analysis by the Carter and Reagan Administrations would help. We need to know more precisely the effects of airline deregulation on the economy. We need retail sales data that better reflect the discount store boom. It would be nice to once again have detailed figures on consumer credit."

Mr. McLenahen concludes his own observations by summarizing the concerns expressed by Dr. Lawrence Chimerine, chairman and chief economist at Chase Econometrics, that U.S. government statistics are not keeping up with fundamental changes in the economy, and that over time the disparity between economic reality and statistical reporting could become a very serious matter.

Example #2. Writing in the January 2, 1986, edition of the New York Times, Clyde Farnsworth notes:

"Nowhere has the problem of the quality of statistics been more at issue than in the monthly reporting of imports and exports by the Commerce Department, on the basis of data from the Customs Bureau.

"The situation has become so serious that Commerce since August has appended what is in effect a consumer warning on each monthly package of trade numbers that it issues.

"The warning is described in statistical jargon as the 'carry-over rate,' designating the portion of one month's imports that did not enter the country in that month.

"The rate for November was 34 percent. That means that 34 percent of the imports recorded for November actually came into the country in October or September or even earlier.

"'This is really an old problem,' said Lawrence J. Fox, vice president of international affairs at the National Association of Manufacturers. 'It didn't make much difference 20 years ago. But now with foreign trade such a national issue people really look at the data, and before you know it, it affects the currency markets and everything else.'"

Example #3. Writing in the January 10, 1986, edition of the Wall Street Journal, Paul Blustein declared:

"The rapidly changing U.S. economy is becoming more service-oriented, computerized and internationalized, but the nation's economic statistics aren't keeping pace. As a result, critics say the government's measurements frequently give a distorted pictures of the economy's health."

Noting that some steps are in fact being taken to remedy defects in our statistical systems, Mr. Blustein continues:

"Budgetary constraints have forced statistical agencies like BLS to forgo research and postpone many steps that critics say are needed to improve economic data. The agencies are channeling their scarce resources into their most essential functions -- gathering and publishing the basic figures.

"The drive to curb government regulation is also having an impact. The Office of Management and Budget recently blocked a Commerce Department project to measure international trade in services because, according to the budget office, the department's survey imposed too great a burden on respondent companies."

While observing that "Precisely what damage has resulted from all this is impossible to determine," Mr. Blustein goes on to cite several examples as evidence that there are indeed "growing gaps in the data."

Example #4. Writing in the October 30, 1985, edition of the Washington Post, Robert J. Samuelson observes:

"Throughout the government, there's been a nibbling away at the statistics we collect to show our own social and economic condition.

"To be sure, these are austere times; and some information is available from private sources. But, mostly, these cutbacks are shortsighted and abandon government's legitimate functions. Good political decisions are hardly guaranteed by good information, but they are even less likely with bad information. It's only when we don't have them that we realize how vital reliable statistics are to our social vision."

Example #5. A Washington Post editorial dated December 23, 1985, takes the administration to task for, in the editorial's phrase, "saving pennies and squandering dollars for the government, in the name of cost-cutting, paperwork-reduction, and privatization, to starve the statistical agencies and choke off the flow of federal statistics from the government agencies to the people."

These concerns were also summed up in the Annual Report of the Joint Economic Committee published just last week. The report notes that our capacity to collect and analyze data plays a critical role in economic forecasting, and that, and I quote, "it is fast becoming apparent that our basic data is not up to the demands of our more sophisticated analytical techniques." In the Committee's judgement, "the quality of Federal economic statistics has been slipping dramatically in recent years. Federal agencies are not collecting as much data as they have in the past and economists fear that a shortage of reliable, consistent data may result."

The Committee's concern in this respect reflects the concerns of the highly respected Commissioner of the Bureau of Labor Statistics, Dr. Janet Norwood, in her recent comment on sharp budget cuts:

"As both a producer and a consumer of Federal statistics, I have found some of these extremely painful. The cuts have eliminated or sharply reduced a number of very useful statistical series."

These concerns are heightened by the intensely competitive nature of the world economy. I have already quoted Lawrence J. Fox, of the National Association of Manufacturers, to the effect that twenty years ago incomplete or delayed trade statistics were of little consequence. The situation today is very different.

It is worth noting, in this regard, that the Japanese attach great importance to their national statistics programs. The first Japanese statistics go back little more than one hundred years and Japan's modern statistics programs were established after 1945 -- by contrast, the first U.S. census was taken in 1790 -- but Japan today has a National Statistics Law. There is also a month-long national celebration in honor of statistics, of which the theme last year was "Statistics are the beacon for our happy life."

In the course of this and subsequent hearings leading authorities will discuss the concerns already outlined. Our first witness this morning is Dr. Courtenay Slater, President of CEC Associates, an economic consulting firm, and from 1977-1981 Chief Economist with the U.S. Department of Commerce. From 1969-1977 Dr. Slater was Assistant Director of the Joint Economic Committee, and it is a pleasure to welcome her back today to discuss the highlights of her study, "Opportunities for Improving Economic Statistics," a bipartisan report just released by the Committee.

Following Dr. Slater's testimony we will hear from Mrs. Katherine Wallman and Dr. Joseph Duncan.

Mrs. Wallman is Executive Director of the Council of Professional Associations on Federal Statistics. She was formerly Deputy Director of the Office of Federal Statistical Policy and Standards at the Office of Management and Budget and, subsequently, Senior Adviser for Statistical Affairs to the Undersecretary of Commerce.

Dr. Joseph Duncan is the corporate economist and chief statistician for Dun & Bradstreet and the Chairman of the Committee on Statistics of the National Association of Business Economists. Dr. Duncan was formerly director of the Office of Federal Statistical Policy and Standards at the Office of Management and Budget, and he has served as U.S. Representative and Chairman of the United Nations Statistical Commission.

Dr. Slater, it is a pleasure to have you rejoin the Committee this morning in a somewhat different capacity.

OPENING STATEMENT OF SENATOR PROXMIRE

Senator **Proxmire**. Well, thank you, Senator. I congratulate you on these hearings. I think that they are extremely important.

I think you are absolutely right when you say that while accurate and adequate statistics don't guarantee good economic policy by any means, you can't have good economic policy unless you have adequate and accurate statistics.

I think the people who serve us in the statistical area have done a remarkable job under the circumstances with limited resources.

We have an extraordinarily complicated country, a changing country, and we have had a revolution with computers and with the technology that has helped us to gather and analyze and collate statistics and I think we really haven't taken advantage of it and we must.

This is the first time I have heard that the Japanese are turned on by statistics. I have had great admiration for the Japanese. I think they are a marvelous people, but I must say this is a new twist that we will have to get into. Anything that will turn you on, especially if it is as clean and crisp as statistics, is pretty fabulous. [Laughter.]

I am delighted that you are starting off with Ms. Slater. As you know, I have been on the committee for many, many years, I think about 26 years, and with all of the people who have served with us, I don't know anybody who has done more and earned our admiration because of the precisiveness of her mind and her hard work and her understanding of these issues than Courtenay Slater.

So I think we are starting off with exactly the right person.

Thank you.

Senator **Sarbanes**. Ms. Slater, we will be happy to hear from you.

STATEMENT OF COURTENAY SLATER, PRESIDENT, CEC ASSOCIATES

Ms. **Slater**. Thank you, Senator Sarbanes, and thank you, Senator Proxmire.

With your permission, I will submit my prepared statement for the record and summarize it informally.

You asked me in your letter requesting me to testify, to elaborate on several aspects of the study I have just completed for you, and I will try to do that.

Before turning to those specifics, I do want to underscore my conviction that the Government's core program for producing economic data is basically sound. I do have many criticisms and a long list of things I would like to see improved, but I don't want to convey the impression that people should regard our statistics as useless or not to be treated with respect.

I have enormous respect for those who work in our statistical agencies, and I am an enthusiastic admirer of their dedication, integrity, and competence. I think we can take a lot of pride in the quality and the objectivity of our statistics about the national economy. I think we ought to treat them with respect and work to preserve and improve them.

Over the past half century a very fine statistical system has been built up, and it has been the result of a lot of effort. I don't think we have fully maintained this progress in the last decade, however. Inadequate funds, uncertainty about budget levels, and weakened central coordination have had a damaging impact on the statistical program.

Increasingly the usefulness of the data has been impaired by delays in updating statistical concepts to reflect the changing nature of the economy. Information about new industries in rapidly changing sectors is often scanty and sometimes misleading. Measures of economic well-being are incomplete and in some cases distorted.

Although the national data generally are timely and accurate, they are not always relevant. They don't always tell us the things that we most need to know. There are many examples of this, and I will just cite a few.

For example, the first price index for computers has only recently been introduced when the GNP was revised last December, and on its introduction we found that it made a dramatic difference in the GNP deflators for producers durable equipment. It is very fine to have this price index, but you wonder where it has been for the last 15 or 20 years.

Another example, business establishments are still classified by industry using the industry definitions issued in 1972, meaning that any industry which has emerged since 1972 or has grown rapidly doesn't have a suitable classification, and you really can't conveniently do good economic analysis about those new industries.

As Senator Sarbanes mentioned in his opening statement, the archaic system of processing import and export documents has been overwhelmed by the growth of imports. Our import statistics on a monthly basis are badly distorted, so badly that seasonal adjustment of them has been suspended.

In another area of economic statistics, our measures of family income omit noncash income such as fringe benefits and in-kind Government assistance. And our definition of poverty is based on consumption patterns of the 1950's and early 1960's. Poverty statistics are not presented in a way that permits ready analysis of the role of the Government in alleviating poverty.

In these examples I have cited in every case I think some corrective steps are now underway. The trouble is that we outside Government don't really know what the next problem to emerge will be. We just know that given the strains in the system these days there are weaknesses. The problems emerge and come to public attention after it is too late to fix them quickly or readily and the damage has already been done. It never should have happened that our import statistics got that badly out of sync.

Not all of the problems are due to budgets, but tight budgets are certainly an important part of the problem, and I would like to summarize some of the trends in statistical budgets.

Virtually all of the agencies that produce economic statistics experienced significant cuts in their inflation adjusted budgets from 1980 to 1982. The combined budgets of the Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis were cut more than 7 percent in real terms over those 2 years.

I do want to underscore that these are statistics which have been adjusted for inflation. In other words, they are not the numbers you would find in the budget itself.

Subsequently there was widespread concern that the cuts had gone too far and that the funding levels of 1982 were not adequate to maintain even a basic system of economic data that we would be satisfied with. And some of these cuts were restored by 1985.

In addition, the Congress gave the Census Bureau funds for one major new program, the survey of income and program participation.

So by 1985 things were somewhat on an uphill trend, but the budgets for 1986 will go down again. For the Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis taken together, the cut, and this is excluding the new SIPP program, will be over 5 percent from 1985 to 1986 after adjustment for the anticipated rate of price increase.

This cut is in part due to the Gramm-Rudman-Hollings provisions and would be partially restored in the administration's recommended budget for 1987. Even so, the inflation adjusted 1987 budget for these three agencies that make up the core of the economic statistics program would be 3 to 4 percent below 1985. So over the 2 years from 1985 to 1987 the budget for these agencies, already tight, will be declining in real terms.

As shown in the table, which is attached to my prepared statement, three other important producers of economic statistics, the Statistics of Income Division of the IRS, the Statistical Reporting Service of the Department of Agriculture, and the Energy Information Agency, would experience even larger cuts.

This proposed budget for economic statistics is not, in my judgment adequate, and my concern is intensified by the prospect that because of the Gramm-Rudman-Hollings requirements there could be further cuts from these proposed levels.

The Senator's letter of invitation asked me my views on where cuts had done the most damage. I am particularly concerned about the proposed 1987 cut in funds needed to keep the Census Bureau's standard statistical establishment list up to date and about the Bureau of Labor Statistics failure to request 1987 funds to implement revision of the standard industrial classification code. I will come back to that in a minute and elaborate on what these programs are and why I think they are so important.

But, first, I would like to mention that I am also concerned about the Bureau of Labor Statistics difficulty in funding the planned improvements in the consumer price index and about the proposed 1987 cuts in spending on occupational employment and local area employment statistics.

Overriding any concern about individual programs, however, is a general concern that planning for the future, research on new methods and techniques, and recruitment and training of future leadership are increasingly inadequate.

Just since I prepared my study for the committee we have had a minor error in the monthly unemployment statistics brought to public attention and, fortunately, it was a minor error making only one-tenth of 1 percent difference in the January unemployment estimate, but I feel it should be taken as a warning signal.

If you are not investing in recruitment and training of the people who collect and tabulate these statistics at the local level, things are going to go wrong. These are the hidden parts of the program that it is sometimes very hard to get adequate funding and adequate attention to. So I want to underscore the need to invest in those basics.

The statistical system is in a sense drawing on its existing capital without making adequate replacement. The damage that is being done to our information base by arbitrary and ill-considered budget cutting is out of all proportion to the minimal contribution that cuts in these programs can make to reducing the budget deficit.

Inadequate total budgets are only part of the problem. Statistical agency heads are often denied the discretion to make the most effective use of available funds. Personnel ceilings, requirements to reduce average personnel grade levels, contracting out requirements, procurement regulations and so forth and so on, each of these with a worthy intent and purpose of its own, when added together, can tie the hands of agency heads very tightly, preventing them from conducting their programs efficiently.

The sequestering of funds in 1986 under Gramm-Rudman-Hollings is an extreme example of lack of discretion. Each program must be cut exactly the same amount. You can't reward efficient management or penalize inefficient management of individual programs. You can't direct your cuts where they will do the least harm. The discretion is not there, and this is causing disruption and damage in many basic statistical programs, the Consumer Price Index being a prominent example, but only one example.

Now I would like to turn to two or three specific questions or areas where I think improvement is needed. It will sound like I am jumping around a lot, but I think these things are best understood through example and these may help bring home the wide range of concerns that are covered by economic statistics.

The first thing I would like to discuss is the need for the Census Bureau and the Bureau of Labor Statistics to share a list of business establishments.

In the United States, in contrast to other countries, economic statistics are produced by a lot of different agencies, and this creates inefficiencies. One of the most serious inefficiencies is that under present arrangements the Census Bureau and the Bureau of Labor Statistics each have to maintain their own comprehensive list of all the business establishments in the country. These are expensive programs and the Census Bureau spends, I believe, about $5 million a year maintaining its business list. It is called the Standard Statistical Establishment List, or the SSEL.

The Census Bureau is not free under present law to share that list with any other agency. This list was developed some years back with the very clear expressed intent of Congress that it would be available to other agencies that did major business surveys, especially the Bureau of Labor Statistics, but that minor amendment to the confidentiality laws to permit that to happen has just never been taken care of.

The General Accounting Office in 1979 put out a report entitled "After Six Years Legal Obstacles Continued To Restrict Government Use of the Standard Statistical Establishment List." That was 1979. The situation is virtually identical today. It was a very good report that GAO did. They ought to reissue it and call it "After Thirteen Years Legal Obstacles Restrict Use of the Standard Statistical Establishment List."

Now all this list consists of is the name and the address of each business establishment, each factory, each store, and each unit. It tells what standard industrial classification the establishment is in, and it has some codes giving you a general idea of the size of the business in terms of sales and of employment. That is all it is. It is not tremendously sensitive confidential type information.

But because the Census Bureau statute says they can't share anything collected from an individual business, and because some of the information comes to Census from IRS and is therefore also covered by a similar provision of the IRS code, the Bureau of Labor Statistics is not able to use this same list to draw samples for their surveys.

Therefore, the Bureau of Labor Statistics has gone ahead and developed its own list for its own use. So each agency is spending several million dollars a year to do exactly the same thing, and they are not coming up with as good a list as they could if they worked together and had one list.

A final irony. This year the Census Bureau proposes in its 1987 budget to cut a million dollars out of its work to maintain the accuracy of its list. I don't know why they proposed this. Of all the places that you could save a million dollars if you have to, this is the last one that they ought to choose. It is going to have very serious consequences for the accuracy of that list and for the quality of the economic censuses that will be taken for 1987 and for the quality of their business surveys. So that is an item of immediate concern.

At the same time, the Bureau of Labor Statistics is requesting in this 1987 budget something over a million dollar increase to improve their list. I don't think either agency knew the other one was going to do this because they go through different budget channels and different Appropriations Committees. It is an example of total lack of coordination and a waste of money that can scarcely be afforded these days.

Protecting the confidentiality of information provided to government is of fundamental importance, and our statistical agencies have a very proud record, and scrupulous observance of that confidentiality should certainly be continued. But all we are talking about here is the sharing by Census and BLS of certain limited information about business establishments among two statistical agencies with long records of protecting confidentiality, and this is no threat to confidentiality.

It would result in substantial cost savings and improved data quality. It is the most important immediate opportunity I know of to improve economic statistics without any major new expenditure.

A second problem area that the Senator has already referred to is improving the trade statistics. There are many things that could be done to improve the trade statistics, but one of the most immediate is that because the Customs Bureau has been overwhelmed by the volume of imports, the imports are not being reported in the month they came in. They are reported when the Customs gets around to tabulating them, which can be several months later. And in some months last year more than half of the imports reported as coming in a particular month actually came in in earlier months.

Customs is still in the pencil and paper age with respect to documentation of imports. Everything is filed in writing on a piece of paper and each import shipment is tabulated individually. There are some things that are being done to speed the tabulation now that the problem has been recognized, and this is helpful, but it is only a partial solution.

Customs is getting ready to introduce a computerized system. They are going to start testing it, I believe next month, and that is very hopeful. But as with every other agency, there is the question mark of what is happening to budgets these days and whether they can sustain this effort and that is an important thing to keep watching.

In addition, there is an opportunity that has received less attention, which is to get better reporting of our exports, particularly with Canada. Our exports to Canada tend to be badly underreported because a lot of them move by land and in many cases the trucker is expected to stop at the border and literally drop a document in a box that is unattended at the border. It is understandable that the truck driver often doesn't bother to do that.

However, these do get recorded as imports when they get to Canada because countries keep track of their imports much better than their exports, and we are talking some $5 billion a year of exports to Canada that don't get reported.

There has been some progress on this. The Canadians and the United States have developed a joint document so that the U.S. exporter fills out only one document and then he is supposed to tear off one part of it and give it to the U.S. authorities and give the rest to the Canadians. But we still have the underreporting because he doesn't bother to file the U.S. part.

The next logical step in this would be for the whole document to be filed with the Canadians and then for the information needed by the United States to be turned over the United States and, of course, vice versa. This can, I think, be pointed to as an area where some progress is being made and further progress is possible, and we can take heart that this may be coming along. It would be a significant improvement.

The final area I would like to discuss is the need to update the definition of poverty. Our official definition is now more than 20 years old. It was a sort of experimental and conceptually limited definition in the first place.

One limitation has already gotten a lot of attention, and this is that we don't count noncash benefits such as food stamps as part of income in determining whether people are poor or not. But this is only one of several problems.

Two other aspects particularly need attention, and I think it would be a mistake to update the definition of poverty in just one way. It needs to be done comprehensively.

We can't measure the role of Government in reducing poverty. At least we can't do it easily by looking at the numbers the Census Bureau publishes because the income numbers include some of the benefits people have received from the Government, if they have received them in money, and they leave them out if they have received them in kind. The income statistics are also before taxes. So what we are looking at is neither a concept of who would be poor if they weren't paying taxes and receiving transfers nor a concept of who is poor after the Government provides them with assistance. It is half way in between.

The basic question you would like to answer these days is what the Government is doing to help people in poverty, are antipoverty programs succeeding and who is still in poverty after the Government does its best. You can't get this from the statistics the way they are currently published or not without an awful lot of work and estimation.

More basically the relationship of the poverty standard to average incomes needs reexamination. The poverty standard was set at three times the cost of a minimum adequate food budget because in 1955 the average family spent one-third of its income on food. This is an arbitrary standard in the first place and never fully satisfying conceptually, but it is obsolete today when the average family spends considerably less than 20 percent of its income on food.

The relationship of a poverty standard to average incomes and living standards is a basic matter of social consensus and not a technical question to be left solely to the statistical agencies.

I would urge this committee to give thought to the procedures by which a consensus on the basis for a new definition of poverty might best be reached.

In my testimony I have drawn examples of current statistical questions from several different areas. In each case I have tried to illustrate the importance and the difficulty of keeping statistical concepts up to date.

To do their jobs well, the statistical agencies need the oversight and interest and support of Members of Congress concerned about the quality of economic data.

I am very pleased that this committee is undertaking this series of hearings, and I very much appreciate the opportunity to participate in them. Of course, I will be glad to answer questions.

Thank you, Senator.

[The prepared statement of Ms. Slater, together with the study entitled "Opportunites for Improving Economic Statistics," follows:]

PREPARED STATEMENT OF COURTENAY SLATER

I appreciate the opportunity to testify before the Joint Economic Committee on the quality of U.S. economic statistics. As Chief Economist for the Department of Commerce from 1977-1981, I supervised two major statistical agencies, the Census Bureau and the Bureau of Economic Analysis, and also the statistical policy office that coordinated statistical programs throughout the Executive Branch. This latter office has since been moved back to OMB, but during my tenure at the Commerce Department I had a unique opportunity to observe and be involved with statistical programs. Presently I am a member of the Committee on National Statistics of the National Academy of Sciences and a member of the American Statistical Association's Committee on Government Statistics. I am testifying this morning as a private individual, however, and not as a representative of either of those organizations.

I have recently completed a study for the Joint Economic Committee entitled Opportunities for Improving Economic Statistics, and much of my testimony this morning is based on that study. The Chairman's letter of invitation asked me to elaborate further on several questions touched on in my study, and I shall do so to the best of my ability.

Before turning to specifics, however, let me underscore my conviction that the government's core program for producing economic data is basically sound. I have enormous respect for those who work in our statistical agencies and am an enthusiastic admirer of their dedication, integrity, and competence. Over the past half century a very fine statistical system has been built up.

This progress has not been fully maintained in the past decade, however. Inadequate funds, continuous uncertainty about budget levels, and weakened central coordination have had a damaging impact on statistical programs. Increasingly the usefulness of the data has been impaired by protracted delays in updating statistical concepts to reflect the changing structure of the economy. As a result, information about new industries and rapidly growing economic sectors is often scanty and sometimes misleading. Measures of economic well-being are incomplete and, in some cases, distorted. Although the national economic data generally are timely and accurate, they are not always relevant. They do not always tell us the things we most need to know.

Several specific examples of lagging statistical response to a changing economy are described in the study I have done for this Committee. Among them are the following.

- o The first price index for computers has only recently been introduced. It still is incomplete.
- o Business establishments are classified by industry using industry definitions last updated in 1972.
- o An archaic processing system has become overwhelmed by a rising volume of import documents, leading to serious distortion of the monthly merchandise trade figures. A new computerized processing system is only now being readied for initial testing.

- Measures of family income omit noncash income, such as private fringe benefits and in-kind government assistance.
- The definition of poverty is based on consumption patterns of the 1950's and early 1960's. Poverty statistics are not presented in ways that permit the analysis of the impact of taxes and government spending on poverty.

These are examples of problems that have now come to public attention. In most cases, corrective steps are at last underway. We must suppose, however, that other such problems -- of which we outside the government are not yet aware -- will be emerging. The most serious damage that has been done to our statistical system during the past few years is not the loss of any specific data set, but the weakening of the capacity to modernize, to innovate, to anticipate changing data needs, to keep up with the times.

Statistical measures cannot and should not adjust immediately to every economic change. Continuous modification of statistical concepts would be confusing and would destroy historical comparability. Presently, however, too many statistical series are outmoded, and there are too many data gaps.

This falling-behind stems at least partly from the combined effect of tight budgets, denial of reasonable management discretion in the allocation of funds, and weakened coordination among statistical agencies. Legal restrictions on the maintenance by the Census Bureau and the Bureau of Labor Statistics of a shared list of business establishments also hamper efficient program operation.

Budget Trends for Statistical Agencies

Virtually all the agencies that produce economic statistics experienced significant cuts in their inflation-adjusted budgets from 1980 to 1982. The combined budgets of the Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis were cut more than 7 percent in real terms over this period.* Subsequently, in response to widespread concern that continuation of 1982 funding levels would cause severe damage to the quality of basic economic statistics, most of these cuts were restored by 1985. In addition, Congress gave the Census Bureau funds for one major new program, the Survey of Income and Program Participation.

Budgets for 1986 will be smaller than 1985, however. For Census, BLS and BEA together, the cut (excluding funds for SIPP) will be over 5 percent, after adjustment for the anticipated rate of price increase. This cut is in part due to the sequestration required by the Gramm-Rudman-Hollings provisions, and would be partially restored in the Administration's recommended budget for 1987. Even so, the inflation-adjusted 1987 budget for these three core statistical agencies (again excluding SIPP) would be 3 to 4 percent below 1985. As shown in the table attached to this statement, three other important producers of economic statistics, the Statistics of Income Division of IRS, the Statistical Reporting Service of the Department of Agriculture and the Energy Information Agency, would experience even larger cuts.

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* The budget figures for these agencies have been adjusted for certain special factors that would distort year-to-year comparisons. See table.

The Administration's proposed 1987 budget for economic statistics is not, in my judgement, adequate. My concern is intensified by the prospect that, should Congress and the Administration fail to agree on budget totals meeting the Gramm-Rudman-Hollings requirements, agencies could again be subjected to arbitrary budget cuts under the sequestration provisions.

The Chairman's letter of invitation asked my views on where cuts have done the most damage. I am particularly concerned about a proposed 1987 cut in the funds needed to keep the Census Bureau's Standard Statistical Establishment List up-to-date and about BLS' failure to request 1987 funds to implement revision of the Standard Industrial Classification code. BLS' difficulty in funding planned improvements in the CPI and their proposed 1987 cuts in spending on occupational employment and local area employment statistics also are of special concern.

Overriding any concern about individual programs, however, is a general concern that planning for the future, research on new methods and techniques, and recruitment and training of future leadership are increasingly inadequate. The statistical system is drawing on its existing capital without making adequate replacement. The damage that is being done to our information base by arbitrary and ill-considered budget cutting is out of all proportion to the minimal contribution that cuts in these programs can make to reducing the budget deficit.

Inadequate total budgets are only part of the problem. Statistical agency heads are often denied the discretion to make most effective use of available funds. Personnel ceilings, personnel grade reduction requirements, contracting requirements, procurement regulations, and directives to cut or enlarge specific programs can combine to create severe administrative difficulties.

The sequestering of funds required in 1986 by the Gramm-Rudman-Hollings deficit reduction plan requires uniform cuts in every agency program or activity. This approach dramatically restricts some agencies' discretion to preserve resources for the most important programs or to provide incentives for efficient management. Unless adjustments in these requirements for arbitrary across the board cuts are made quickly, the 1986 sequestration will have serious consequences for the quality of some programs. The Consumer Price Index is a prominent example.

The Need for a Joint Census-BLS Business List.

In contrast to many other countries, the United States does not have a central statistical agency. Economic statistics are produced by a number of agencies within a number of different departments. This diversity has advantages, but it also creates inefficiencies. Among the most serious of these inefficiencies is the maintenance by the Census Bureau and the Bureau of Labor Statistics of separate lists of business establishments for use as sampling frames for business surveys. The Census Bureau's list, the Standard Statistical Establishment List, was funded and developed with the intent of making it available to other agencies conducting business surveys. However, legislation amending confidentiality laws to allow the list to be shared has never been enacted.

BLS thus has proceeded to develop its own list and is seeking additional 1987 funding to improve it. If BLS and the Census Bureau could jointly maintain a single list of business establishments, rather than each maintaining a separate list, a more accurate list could be maintained at less expense. Similar benefits would result from a joint Census-BLS program to assign firms to industries according to the revised industry definitions now being prepared through the SIC revision process. A limited amendment to the confidentiality laws to accomplish these objectives would permit an important improvement in economic statistics.

Protecting the confidentiality of information provided to the government is of fundamental importance. The confidence that citizens can place in the scrupulous observance of the confidentiality laws is a great strength of the U.S. statistical system. The sharing by Census and BLS of certain limited information about business establishments would pose no threat to confidentiality, however, and would result in substantial cost savings and in improved data quality. This is the most important immediate opportunity I know of to improve economic statistics without any major new expenditure.

Improving Trade Statistics

Timely Import Reporting. Failure to modernize statistical concepts and procedures has had particularly serious consequences for data about U.S. foreign trade. The Census Bureau tabulates monthly totals for exports and imports based on documents collected by the Customs Service. As the volume of imports has grown, so have delays in Customs' processing of these documents. In some months last year, more than one-half the imports statistically assigned to that month actually arrived in earlier periods. This massive misreporting of when imports arrive has forced the Census Bureau to stop seasonally adjusting the trade data and has seriously distorted the GNP estimates for some recent quarters.

Joint Census-Customs efforts to improve processing procedures are now producing some improvement, and Customs will at last begin introducing computerized import reporting within a few months. Several years will be needed, however, to establish a revised time series and resume seasonal adjustment. The import data are a glaring example of a problem that should have been spotted sooner and corrected before it grew to such proportions. Present corrective efforts will need to be pursued vigorously over a sustained period, and this may prove difficult given the present budget climate.

Full Reporting of Exports. U.S. exports are chronically under-reported, especially those transported by land to Canada. Some 12 to 13 percent of U.S. exports to Canada are not reported to U.S. authorities. Such under-reporting makes our trade deficit appear even larger than it is, and it distorts analysis of trade in specific commodities.

All countries typically obtain more complete reporting of imports than exports. Canadian data on imports from the United States is much more complete than the U.S. export data. Recent development of a joint U.S.-Canadian trade document is an important step toward eventual exchange of data. Data exchange -- by which I mean deriving U.S. export data from the shippers' documents filed with the Canadian import authorities, and vice versa -- could cut costs and reporting burden and provide more accurate statistics. Over time similar arrangements with other major trading partners should be pursued.

Updating the Poverty Definitions

Our official definition of poverty is now more than 20 years old, and it is time for a comprehensive update.

One limitation of the current definition is the failure to take into account the noncash benefits which have now become such an important part of income. But this is only one of several problems. Measurement and valuation of noncash benefits has received much recent attention, while other weaknesses in the poverty definition have been largely ignored. It would be a mistake to change only this one aspect of the poverty definition.

Two other aspects particularly need attention.

1. We need to be able to measure the role of the government in reducing poverty. To do this we need to know both pre-tax, pre-transfer and after-tax, after-transfer income. Whether the transfers are made in cash or in kind is a secondary consideration. At present, poverty statistics are presented in such a way that the impact of taxes and transfers cannot be readily identified.

2. The relationship of the poverty standard to average incomes needs reexamination. The poverty standard is set at three times the cost of a minimum adequate food budget because in 1955 the average family spent one-third of its income on food. This arbitrary standard -- never conceptually very satisfying -- seems obsolete today, when the average family spends less than 20 percent of its income on food.

The relationship of a poverty standard to average incomes and living standards is a basic matter of social consensus, not a technical question to be left solely to the statistical agencies. I would urge this Committee to give thought to the procedures by which a consensus on the basis for a new definition of poverty might best be reached.

In my testimony, I have drawn examples of current statistical questions from several very different areas. In each case I have tried to illustrate the importance, and the difficulty, of keeping statistical concepts up-to-date. To do their jobs well, the statistical agencies need the oversight and support of Members of Congress concerned about the quality of economic data. Hearings such as the present one are important, and I appreciate this opportunity to testify.

Budget Authority for Major Statistical Agencies, Fiscal Years 1978-1987
(millions of constant 1982 dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986		1987
									as enacted	with GRH	
Census Bureau current programs*	65.9	65.6	63.2	60.9	57.2	64.6	70.1	75.1	77.2	73.8	75.3
SIPP		1.2	1.2	1.4	.0	2.6	10.8	13.9	17.2	16.4	16.8
Other current programs	65.9	64.5	62.0	59.5	57.2	62.0	59.3	61.2	59.9	57.4	58.6
Bureau of Labor Statistics*	116.0	122.0	121.1	118.2	113.1	117.1	118.9	124.2	122.2	116.9	119.9
Bureau of Economic Analysis*	19.5	19.0	18.6	18.2	18.0	18.4	18.9	19.1	19.8	18.9	18.6
Statistics of Income Div, IRS	19.1	18.3	17.2	15.5	16.4	14.1	16.5	17.2	13.0	12.5	13.0
Stat Reporting Serv, USDA**	55.8	55.7	57.6	57.2	51.6	49.9	50.7	52.7	51.4	49.2	50.3
Energy Information Administrat'n	N/A	N/A	106.8	96.2	78.9	54.3	52.6	55.1	52.7	50.5	50.3

* Excludes certain transfers not affecting total program level for economic statistics. Also excludes CPI revisions from the BLS totals. See Opportunities For Improving Economic Statistics.

** Obligations.

N/A = not available

OPPORTUNITIES FOR IMPROVING ECONOMIC STATISTICS

A Study
prepared for the
Joint Economic Committee
U.S. Congress

by
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March 1986

OPPORTUNITIES FOR IMPROVING ECONOMIC STATISTICS

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OPPORTUNITIES FOR IMPROVING ECONOMIC STATISTICS

SUMMARY

The federal government's core program for producing economic data is basically sound. Increasingly, however, the usefulness of the data produced is impaired by protracted delays in updating statistical concepts to reflect the changing structure of the economy. As a result, information about new industries and rapidly growing economic sectors is often scanty and sometimes misleading. Measures of economic well-being are incomplete and, in some cases, distorted. Policymakers and business decision-makers need more complete and more relevant information.

Specific examples of lagging statistical response to a changing economy include the following:

- The first price index for computers has only recently been introduced. It still is incomplete (see Section I).
- Business establishments are classified by industry using industry definitions last updated in 1972 (see Section III).
- An archaic processing system has become overwhelmed by a rising volume of import documents, leading to serious distortion of the monthly merchandise trade figures. A new computerized processing system is still months away from its first partial introduction (see Section II).
- Measures of family income omit noncash income, such as private fringe benefits and in-kind government assistance (see Section IV).
- The definition of poverty is based on consumption patterns of the 1950's and early 1960's. Poverty statistics are not presented in ways that permit the analysis of the impact of taxes and government spending on poverty (see Section IV).

Statistical measures cannot and should not adjust immediately to every economic change. Continuous modification of statistical concepts would be confusing and would destroy historical comparability. Presently, however, too many statistical series are outmoded, and there are too many data gaps.

This falling behind stems at least partly from the combined effect of tight budgets, denial of reasonable management discretion in the allocation of funds, and weakened coordination among statistical agencies. Legal restrictions on the maintenance by the Census Bureau and the Bureau of Labor Statistics of a shared list of business establishments also hamper efficient program operation.

Tight Budgets. For most of the agencies that are the major producers of economic statistics FY1987 budgets as recommended by the Administration would be below 1980 levels after adjustment for inflation (see Section V). An exception is the Census Bureau, where introduction of the new Survey of Income and Program Participation has caused the budget to grow. Excluding SIPP, the inflation-adjusted budget for Census Bureau current programs has declined 5 percent since 1980.

In some of the intervening years, such as 1982, budgets were even tighter than the one proposed for 1987. Some data series have been abolished because of tight budgets. Less visible, but more serious effects have been the attrition of research, development, and modernization and the difficulty of attracting and keeping qualified staff.

Lack of Management Discretion. Statistical agency heads are often denied the discretion to make most effective use of available funds. Personnel ceilings, personnel grade reduction requirements, contracting requirements, procurement regulations, and directives to cut or enlarge specific programs can combine to create severe administrative difficulties.

The sequestering of funds required in 1986 by the Gramm-Rudman-Hollings deficit reduction plan requires uniform cuts in every agency program or activity. This approach dramatically restricts some agencies' discretion to preserve resources for the most important programs or to provide incentives for efficient management. Such sequestering is under constitutional challenge, but for now the agencies must proceed with the 1986 cuts. Unless adjustments in these requirements for arbitrary across the board cuts are made quickly, the 1986 sequestration will have serious consequences for the quality of some programs. The Consumer Price Index is a prominent example (see Section V).

The Need for Joint Access to Business Lists. In constrast to many other countries, the United States does not have a central statistical agency. Economic statistics are produced by a number of agencies within a number of different departments. This diversity has advantages, but it also creates inefficiencies. Inefficiency is compounded by laws preventing the exchange among statistical agencies of individually-identifiable information about businesses or individuals.

Protecting the confidentiality of information provided to the government is of fundamental importance. The confidence that citizens can place in the scrupulous observance of the confidentiality laws is a great strength of the U.S. statistical system. The sharing of certain limited information about business establishments among specified statistical agencies would pose no threat to confidentiality, however, and would result in cost savings and improved data quality. In particular, if the Bureau of Labor Statistics and the Census Bureau could jointly maintain a list of business establishments, rather than each maintaining a separate list, a more accurate list could be maintained at less expense. Similar benefits would result from a joint Census-BLS program to assign firms to industries according to the revised industry definitions now being prepared through the SIC revision process. A limited amendment to the confidentiality laws to accomplish these objectives would permit an important improvement in economic statistics (see Sections III and V).

OPPORTUNITIES FOR IMPROVING ECONOMIC STATISTICS

INTRODUCTION

Economists today are accustomed to the ready availability of reasonably timely, complete, and accurate information about the U.S. economy. It is easy to forget that such data have not always been available. The population and business censuses date back many years, but to a large extent, other now familiar economic statistics are the product of sustained development efforts undertaken during the past half-century. Monthly Current Population Survey data about labor force, employment and unemployment, for example, first became regularly available in the 1940s. Regular quarterly estimates of real Gross National Product first appeared in 1958. Annual estimates of the number of individuals and families in poverty were not initiated until the 1960s.

The development and maintenance of adequate economic statistics require continuous attention. Otherwise, even a good statistical program becomes outdated as the structure of the economy changes. Greater participation of the United States in the world economy, for example, has increased the importance of good measures of U.S. international trade. At the same time, a higher volume of trade has placed added burdens on a reporting system ill-equipped to handle them. Thus a situation has been created in which the trade data have grown more important but less accurate and less timely.

There are numerous other examples of evolving data needs. The increased importance of noncash income, whether "in kind" government transfers to the poor or employer-provided health insurance for the well-to-do, has increased the importance of better definitions and measures of these kinds of income. The rapid growth of new service industries has created the need for better information about this now-dominant sector of the economy. The widespread use of price indices to determine increases in government benefits and in private wage payments has increased the importance of timely and accurate price measures.

The Struggle to Keep Up-to-Date

During the past decade, it has been difficult for federal statistical agencies to produce the new and updated statistical measures needed to satisfy changing needs for information. Like most other civilian government agencies, the statistical agencies have been faced with severe budget constraints and tight personnel ceilings. At the same time, a series of administrative changes have weakened the inter-agency coordinating mechanisms traditionally used to promote the efficient operation of the decentralized statistical program.

Budget cuts for statistical programs have led to the cancellation of some data collection programs. For example, monthly data on the layoff rate in manufacturing -- once widely used by business cycle analysts -- have not been available since the end of 1981. The frequency with which certain other data are collected has been reduced. For example, the former Annual Housing Survey has become the American Housing Survey, with data collected only every third year. In other cases, sample sizes have been reduced or the time taken to process and publish data has increased. Legal mandates for new data collection have in some cases not been fulfilled, the most prominent example being the failure to conduct a mid-decade census in 1985. Definitional issues have been set aside: the Standard Industrial Classification (SIC) code has not been revised since 1972, and the poverty standard has remained basically unchanged for over twenty years.

These cutbacks and deficiencies in statistical programs have been described elsewhere, and their impact widely discussed.1/ It is not necessary to review them in detail here. Other impacts of the budgetary and administrative difficulties of the past decade are less obvious, but in the long run may be more important. The most important basic data collections have been maintained, but planning and research for new and better ways to meet changing needs and to take advantage of new technology have suffered. Ultimately this neglect is likely to add to the cost of statistical programs as well as weaken their quality.

A related problem is the difficulty of attracting talented new personnel to careers in federal statistical agencies. Even where personnel ceilings and budget cuts do not prevent new hiring, talented young people are unlikely to be attracted to jobs that offer limited opportunities for new and innovative work. Significantly better financial opportunities in the private sector for some specialties, such as computer experts, also have contributed to the difficulty of attracting the best young professionals.

New Initiatives

The past decade has been a difficult one for the statistical agencies, but some important new initiatives have been undertaken. The recent comprehensive GNP revisions, for example, incorporate more complete estimates of underground economic activity and a new index of changes in computer prices. The Census Bureau's new Survey of Income and Program Participation (SIPP) is now regularly gathering detailed information on cash and noncash income and on household wealth. New initiatives to improve service industry data are underway in the Labor and Commerce Departments.

The SIPP survey and the service industry data initiative resulted from congressional actions to provide budget authority over the initial objections of the Administration. These are prominent examples of the impact of congressional oversight on the statistical program during the past few years.

Also influential on the statistical program during recent years has been the interest expressed by concerned groups of data users. The Council of Professional Associations on Federal Statistics (COPAFS), formed in 1980, and the Association of Public Data Users (APDU), formed in 1976, are among a number of the outside groups that follow statistical program developments with interest and concern.

Current Prospects

Thanks in part to explicit congressional actions and to the concern expressed by outside groups, the deep cuts in statistical budgets that occurred in 1981 and 1982 have been partially restored. The basic adequacy of national economic data, which many observers feared was threatened, has for now been preserved. It is doubtful, however, that planning for the future, research on new methods and techniques, and recruitment and training of future leadership is adequate. The statistical system has been drawing on its existing capital without making adequate replacement. As with an industrial concern that wears out its machinery and retires its top management, invests little in research and development, and fails to adopt new technologies, this is an unsound situation.

Statistical programs, like other federal activites, now face new budget constraints stemming from the recently enacted Gramm-Rudman-Hollings deficit reduction requirements. The combination of weakened central coordination within the executive branch and the requirements to achieve immediate spending reductions threatens continued, if not heightened, failure to invest in a strong statistical system. Opportunities to initiate more efficient long-term approaches to data collection and presentation are apt to be sacrificed to short-term budget cuts. The statistical system could be severely damaged by a new round of ill-considered immediate budget cuts. Ironically, one of the costs of such a development would be a lessened ability to measure the economic impact of Gramm-Rudman-Hollings.

Organization of this Study

The next four sections of this study highlight recent developments and improvement needs in four areas of econonomic statistics. Section I discusses the data required to produce estimates of GNP and the related series which make up the National Income and Product Accounts. Section II is concerned with the data on merchandise exports and imports. Sections III and IV are largely concerned with definitional questions important to obtaining meaningful statistics. Section III deals with the industry definitions in the Standard Industrial Classification (SIC) code. Section IV discusses data on income and wealth, with particular attention to the need for up-to-date definitions of income and poverty. Each of these four sections is a case study designed to illustrate points of more general applicability: the effort required to keep statistics up-to-date; the progress that has been made; the problems that remain; difficulties of coordination among the many agencies producing statistics; and the impact of inadequate budgets. Finally, Section V looks at budget trends for the key agencies producing economic statistics and the impact of budget changes on program quality.

In identifying statistical improvement needs, emphasis has been placed on those potential improvements requiring modest, if any, additions to agency budgets. Special emphasis is placed on actions that would achieve budget savings while maintaining or improving data quality. Important examples of such savings exist. It should not be supposed, however, that in total it is possible to simultaneously reduce spending and improve data quality. Budgets are already lean. Further large cuts could mean starvation. The consequences for our ability to measure and understand economic developments could be quite serious.

I. GNP AND GNP DATA SOURCES

The GNP and other measures that constitute the National Income and Product Accounts (NIPAs) are not a set of statistics collected in a census or sample survey, but rather an accounting system. These accounts, which are prepared by the Commerce Department's Bureau of Economic Analysis (BEA), utilize information from many different sources to construct an overall picture of the economy. The quality of the accounts depends on the quality of the source data from which they are constructed and the conceptual adequacy of the accounting framework itself. The historical NIPA data have recently undergone major revision. The nature of the revision process and its impact on the statistics illustrate the conceptual and statistical considerations involved in maintaining the quality of the national accounts.

The GNP Revisions

Comprehensive revisions of the national accounts, such as the one released in December 1985, are carried out every five years or so to incorporate newly available statistical information and to update the accounting framework to reflect changes in the structure of the economy.1/ Two of the many changes introduced as part of the 1985 revisions are larger allowances for underground economic activity and a new measure of changes in computer prices. Examination of the impact of these two changes illustrates the importance of updating the national accounts.

Accounting for the Underground Economy. The recent revisions generally confirm the previously available estimates of the average rate of growth of current dollar GNP. The *levels* of GNP, national income, and personal income (as distinguished from their rates of growth) are revised upward in all recent years, however. For 1984, for example, GNP and personal income were revised up a bit over 3 percent. This means that disposable personal income per capita is now estimated to be about $400 higher than the previously available data indicated.

Some individual components of personal income experienced much larger revision. In particular, nonfarm proprietors' income, the category that measures income from self-employment, was revised up nearly 60 percent. This increase is primarily due to the introduction of larger adjustments to correct for income misreporting on tax returns; that is, for the "underground" income earned through legitimate economic activity but not reported as it should be for tax purposes.

Income from self-employment is much less fully reported on tax returns than are wages and salaries. In addition, BEA is more dependent on tax information to estimate this income category than others, for which other data sources are used. Thus, the growth in recent years of the underground economy -- which is largely a self-employment phenonmenon -- has increased the importance of adequate adjustment of the national accounts for tax misreporting.

Underground income is difficult to measure since, almost by definition, it does not show up in tax or other reporting systems. To develop the new adjustments for underground income, BEA, working with the Internal Revenue Service (IRS) and the Census Bureau, carried out special studies of the results of IRS tax audits and of coverage of sole proprietorships in the economic censuses. Procedures for estimating the amount of income not properly reported on tax returns were developed based on these studies.2/ These allowances for underground income are rough estimates, necessarily based on information about tax compliance several years ago. No information is yet available about how more recent changes in tax laws and IRS collection procedures may have affected income misreporting.

Measuring Changes in Computer Prices. In the recent GNP revisions, the primary price measure, the fixed-weight price index, was revised down in almost all recent years. According to the revised data, the prices of the goods and services that make up the GNP on the average rose about 6.6 percent per year from 1972-1984; the previous estimate was 7.3 percent.

Prices of producers' durable equipment, previously estimated to have risen an average of 6.9 percent per year from 1972-1984, are now estimated to have been rising at only a 1.7 percent rate. This dramatic downward revision resulted primarily from the introduction of estimates of changes in computer prices.

Rapid changes in computer designs and prices make measurement of price changes a difficult problem. Although it has long been apparent that the cost of obtaining any given amount of computer capability has been falling rapidly, no good statistical measure of this phenonmenon had previously been available, and, in the GNP accounts, computer prices had been assumed to remain constant. The new index provides, for the first time, a statistical measure of changes in computer prices and shows these prices to have dropped an average of 14 percent per year from 1972 to 1984.3/ These declines have offset a large part of the increase in prices of other business and industrial equipment, so that, as noted, the overall cost of such equipment has shown a much more modest rate of increase than indicated by previously available data.

To develop its new computer price measures, BEA worked with information provided by the IBM Company about changes in the designs and prices of IBM computers. The new index is an important advance in price measurment, but it still does not cover a fully representative sample of non-IBM computers. A more adequate price index will require the cooperative efforts of BEA and the Bureau of Labor Statistics (BLS) to gather and properly interpret changes in computer prices.

BLS is initiating work this year on an experimental computer price index. Initial data collection will begin this summer and several approaches to measuring price change will be investigated. Within two years or so BLS hopes to introduce collection of computer prices into its regular producer price program. This is dependent, however, on successful outcome of the research efforts now getting underway.

The Importance of Updating the GNP. The major revisions to nonfarm proprietors' income to take account of the underground economy and to prices of producers durable equipment to reflect falling computer prices illustrate how important it is to update statistical measures to reflect changes in the economy. In these and other instances it is an understanding of what is happening to individual components of the economy, even more than the overall GNP totals, which is particularly aided by the availability of up-to-date information.

The above discussion highlights only two of many changes incorporated into the GNP revisions. Several general points are illustrated. First, the research and development efforts behind the GNP revisions are not a routine affair but a complex and time-consuming process requiring initiative and leadership from analysts who have a firm conceptual grasp of important changes in the economy. The active cooperation of many federal agencies and, at times, private sources of information and expertise also are required.

Second, the revisions, welcome as they are, are often long overdue. An index of computer prices, for example, should have been available sooner. Its absence left analysts and policymakers relying on quite misleading estimates of the costs of producers' durable equipment.

Third, much remains to be done. The estimates of underground economic activity need refinement and updating. The computer price index requires expansion to cover more brands of computers. Other price categories, such as that for non-residential construction, also need attention, and so on.

This discussion is intended, not to list all needed improvements in the GNP, but to illustrate the process by which improvement occurs and to show the importance of investing, not just in routine production of regular quarterly data, but in the research and development activity needed to maintain and enhance data quality.

Publication of Descriptions of GNP Methodology

Intelligent use of the GNP for economic analysis requires an understanding of the methodology used to prepare the estimates. A great deal of information about the methodology may be found in various articles in BEA's monthly publication, The Survey of Current Business, and BEA employees are typically helpful in responding informally to requests for additional information on specific points.

Users have repeatedly expressed the need for an up-to-date methodological handbook, however, and a comprehensive description of the NIPA methodology has been in preparation at BEA for several years. This methodological description is now being published as a series of papers describing different parts of the accounts. The first two papers, a general overview and a description of how the estimates of corporate profits are prepared, were published in 1985.4/ A paper on the methodology for estimating international transactions is scheduled for publication during 1986, and additional papers are expected to be published at a rate of approximately two per year.

GNP Source Data

The national accounts draw on many sources of data. The economic censuses, the Census Bureau's current business surveys, and BLS' data on prices and employment are major sources, but key components of the accounts come from IRS tabulations, Medicare and Medicaid records, Agriculture Department surveys, regulatory agency records, and many other public and private sources.5/

Apart from some of the regular Census Bureau and BLS statistical programs, the data used for the national accounts typically are originally gathered for other purposes. For BEA to duplicate this already-available information would be an enormously costly and wasteful process. Reliance on many sources outside BEA's control makes the national accounts vulnerable to budget cutbacks and program changes at other agencies, however. An agency that no longer needs a particular set of information for its own purposes is likely to feel little if any responsibility to continue collecting it for BEA's use. In some cases, decisionmakers at the collecting agency may not even be aware of BEA's reliance on the information.

Three developments have occured in recent years that, in combination, have posed a serious threat to the continued availability to BEA of key source data for the national accounts. One is the deregulation effort, which has had a particularly severe impact on the transportation data previously available from the Civil Aeronautics Board and the Interstate Commerce Commission. The second development has been the budget cuts that have occurred in many civilian agency programs. An agency for which statistical work is a secondary activity is often apt to make its statistical program a prime target of budget cuts. Finally, the reduction in the size and authority of the statistical policy group at the Office of Management and Budget (OMB) has left the statistical program with a weakened process for communication and coordination between BEA and the data-supplying agencies.

These three developments came together with particular force in 1981 and 1982, arousing considerable concern about the effect on the national accounts of losses of source data.6/ This widely expressed concern probably helped in warding off some of the most serious threats to the GNP source data. Some cuts did occur, however, and the continued availability of other sources remains uncertain. In particular, responsibility for data about air and surface transportation remains unclear following elimination of the Civil Aeronautics Board and major statistical program cuts at the Interstate Commerce Commission.7/

Since 1982, BEA has established a new system for monitoring proposed changes in statistical programs in the agencies from which it obtains data. This provides advance warning of some proposed data cuts and enables BEA to inform the data-supplying agency of the implications for the national accounts. BEA's monitoring system is not designed to track sudden suspensions of ongoing statistical activities, however. There is no system in place to notify BEA of situations in which the sequestering of funds under the Gramm-Rudman-Hollings provisions may affect source data for the GNP accounts.

II. EXPORT AND IMPORT DATA

The greatly enlarged role of international trade in the U.S. economy has increased the importance of good statistical measures of exports and imports. Exports have risen as a share of GNP in recent decades, and more recently, imports have grown even more rapidly, leading to the extraordinarily large trade deficits of the past few years. These deficits have had especially damaging effects on certain industries and geographic regions within the United States, increasing the need for timely and accurate data about trade in individual commodities and with individual countries. Accurate current data are especially important for identifying changing patterns of trade, such as the improvements expected to result from the recent decline in the international exchange value of the dollar.

The trade growth that has increased the importance of good statistics has also had the effect of making the merchandise trade statistics less timely and reliable, however, because the growing flood of trade documents has caused serious processing delays.

Lags in Processing Import Documents

Monthly data on merchandise exports and imports are compiled and published by the Census Bureau based on documents collected from exporters and importers by the Customs Service. The Census Bureau reports the data by statistical month. Each statistical month's totals include import entries and export shipments: (1) actually occurring in that month and reported to the Census Bureau by the fifteenth of the following month; and (2) actually occurring in earlier months but not reported to the Census Bureau in time to be included in prior months' totals (the "carryover").

The time required for Customs to process and transmit trade documents has increased as trade volume has grown, with the lags becoming especially severe for import documents. What was once a relatively minor problem of delayed Census Bureau receipt of documents and consequent carryover of reporting of some imports to months following the actual month of entry has become much more serious.

If import flows were even throughout the year and if the timing lags were uniform, the carryover would be relatively constant and hence of no great importance. Neither of these conditions holds, however. Many kinds of imports follow distinct seasonal patterns, and the reporting lags have varied considerably from month to month. In 1985, the carryover of earlier months imports included in each statistical month's total range from 35 percent in October to 53 percent in January.1/ These timing lags largely even out over periods of a year or longer, but they present a serious obstacle to using the monthly data to identify shifts in trade patterns.

The lags also have had a serious effect on the accuracy of the quarterly GNP data. In the recent comprehensive GNP revisions, the annual rate of growth of real GNP in the fourth quarter of 1984 was revised down from an initially reported 4.3 percent to only 0.6 percent. In contrast, the corresponding figures for the first quarter of 1985 were revised up from just 0.3 percent as initially reported to a revised 3.7 percent. About two-thirds of the fourth quarter revision and over one-third of the first quarter revision stemmed from corrections to the timing of exports and imports.

The import reporting lags vary by port of entry and by commodity imported, thus presenting especially serious problems for analysis of trade by commodity group or by country of origin. Beginning with the data for January 1986, the Census Bureau is suspending seasonal adjustment of monthly merchandise trade data because, in the Bureau's phrase, the high and variable carryover "significantly distorts any historic seasonal pattern and makes adjustment largely meaningless."2/

To provide more meaningful trade data, the Census Bureau has begun publishing a second set of monthly trade totals pertaining to a revised statistical month. These come out a month later than the original estimates and include in each months' total import entries and export shipments: (1) actually occurring in that month and reported to the Census Bureau within 45 days after the end of the month; and (2) occurring in earlier months but not reported to the Census Bureau until more than 45 days after the end of the month in which they occurred.

During the first 11 months of 1985, the carryover still included in these revised statistical month totals ranged from only 4 percent in October to 16 percent in February.3/ As shown in the accompanying table, the more accurate import totals for the revised statistical month often differed substantially from the initially reported data. The difference averaged over 5 percent and hit a high of 13 percent in September.

The revised statistical month series is more accurate than the initially published data, but it naturally receives less attention, since it is not the first data reported, and the multiplicity of data series is confusing. Also, the revised series provides only totals for exports and imports, not the detail by commodity and country of origin. It is a palliative rather than a solution for this serious data problem.

A partial solution lies in speeding up the processing of import documents. The Census Bureau and the Customs Service have been jointly reviewing processing procedures and identifying ways to speed up transmission of documents to the Census Bureau. Smaller carryovers in the last three months of 1985 may reflect some initial results from this effort. Census Bureau staff believe further efforts along these lines may reduce the carryover to 25 percent.

Additional progress in reducing the carryover may have to await introduction of a computerized system for filing import documents. At

Imports by Statistical Month, Original and Revised: 1985
millions of dollars, c.i.f.*

Statistical Month	Original	Revised	Percent Diff.	Carryover (%)	
				Original	Revised
January	30,245	28,245	6.6	53.5	12.6
February	27,169	26,481	2.5	52.2	16.3
March	30,107	29,864	.8	44.8	13.8
April	29,907	30,089	.6	44.3	8.7
May	30,712	31,273	1.8	43.7	7.0
June	31,596	28,603	9.5	44.2	6.7
July	28,312	30,191	6.6	38.8	6.5
August	27,512	29,366	6.7	46.8	8.8
September	32,860	28,581	13.0	44.8	4.7
October	29,695	31,901	7.4	35.2	3.8
November	31,371	30,478	2.8	40.3	4.6
December	32,141	N/A	N/A	36.6	N/A

*Cost, insurance, freight at U.S. port of entry. Data not adjusted for seasonal or working day variation.

N/A = not available

Source: U.S. Bureau of the Census

present, all import documents are filed on paper and manually processed. Only when the documents reach the Census Bureau are they entered into a computer. The Customs Service is in the process of developing a system for computerized filing by large importers, and some computerized operations are scheduled to begin this summer. When fully implemented, this system is expected to cover 60 to 70 percent of all imports, but several years will be required to reach full implementation.

Underreporting of Exports

A long-standing problem with the monthly merchandise trade statistics is that exports tend to be less fully reported than imports. Customs procedures in the United States and other countries generally provide for careful documentation of imports. Export reporting is far more dependent on the voluntary compliance of the exporter. Exports transported by land, as between the United States and Canada, are especially likely to go unreported, since reporting may require that the trucker voluntarily stop at the border and deposit documents in an unattended box. In recent years, 12 to 13 percent of U.S. exports to Canada have not been reported to U.S. authorities. As a result, the Canadians have recorded receiving $5 to $6 billion more per year in imports from the United States than the United States records in exports to Canada.4/

Underreporting of Canadian exports to the United States is less severe. An annual reconciliation process conducted jointly by the United States and Canada indicates net overstatement by the United States of its merchandise trade deficit with Canada by amounts ranging in recent years from $2.2 to $4.6 billion. These figures are the net result of a number of factors entering into the reconciliation, but the failure of U.S. exporters to file export documents is by far the most important.5/ The BEA's quarterly data on international trade incorporate the results of the U.S.-Canadian reconciliation process and thus give a more accurate picture of U.S.-Canadian trade than do the monthly merchandise trade statistics.

Obtaining complete export reporting by monitoring exporters to insure compliance would be difficult and costly. A more efficient approach to obtaining better export data may lie in the shared use by the United States and Canada of a single export-import document. This would reduce reporting burden on exporters as well as provide more accurate data. Within the past few years a common document has been developed, and U.S. exporters are being encouraged to make use of it. Filing procedures still require that the section of this document destined for the U.S. authorities be submitted directly to them by the exporter, however, and failure to report continues to be widespread. The next logical step in this move toward a joint document would be for the entire document to be filed with the Canadian authorities, who would then return the U.S. section to the U.S. authorities.

The present U.S.-Canadian reconciliation procedures and the development of the joint document grew out of joint concern for better statistics, and are examples of close and friendly cooperation between statistical agencies in the two countries. Extension of this cooperation to a more complete system of joint filing of trade documents would make a further important contribution to accurate trade statistics.

Underreporting is less severe when goods travel by air or water, but some significant underreporting of exports to other countries undoubtedly occurs. The Census Bureau presently has studies underway to determine how serious a problem this may be. If a serious problem is identified, it may be partially amenable to improved procedures at ports of shipment. It may also be, however, that joint studies with other major trading partners, similar to those initially conducted by the United States and Canada, would be helpful and could lead to other opportunities for the use of common documents.

In 1988, the United States and its major trading partners will begin using the Harmonized Commodity Classification and Coding System, providing for the first time a uniform international system of commodity classifications for exports and imports. Among many benefits of this system should be the increased opportunity for efficient data collection through use of common documents.

III. INDUSTRY DEFINITIONS AND CLASSIFICATIONS

To be useful for industrial analysis, statistical information collected from businesses must be tabulated into industry groupings that accurately reflect the structure of the economy. The system used for achieving these industry groupings is the Standard Industrial Classification (SIC) code. The industry definitions used in the SIC code profoundly influence the results of industrial analyses, and maintaining an adequate SIC code is of the utmost importance. The present SIC code has been widely criticized for being out-of-date and for over-emphasizing manufacturing as compared to other industrial sectors.

The SIC code has not been revised since 1972, an unusually long time for it to remain unchanged. A revision is presently being prepared, but budget cuts may threaten its implementation. Opportunities exist to reduce the costs of implementing the SIC revisions, but taking advantage of them will require enabling legislation and increased inter-agency cooperation.

Limitations of the Present SIC Code

As noted, the SIC code was last revised in 1972. Many changes have taken place in the intervening years. New industries have emerged, some existing industries have grown dramatically, and others have shrunk or disappeared. Computer software producers and retail computer stores are two examples of industries that have become important since 1972 and that lack separate SIC categories. The lack of useful data about industries such as these makes it difficult to analyze their economic significance.

In general, the problems created by an outdated SIC code are more acute for the service industries than for manufacturing. Congress has mandated new efforts by the Labor and Commerce Departments to improve service industry data and has appropriated funds explicitly for this purpose. As these improvement efforts have gotten underway, it has become increasingly apparent that one of the major impediments to better service industry data is the lack of adequate SIC categories in which to present the available data.1/

The present SIC code divides business activity into 1230 individual ("4-digit") industrial categories.2/ Of these, 569, or 46 percent, are in manufacturing, although manufacturing accounts for only about 20 percent of U.S. civilian employment. Some of the manufacturing categories identify small sub-components of larger industries. Examples include "bolts, nuts, rivets and washers", (a category employing only

46,200 people in 1983), "residential lighting fixtures" (25,100 employed), and "envelopes" (24,700 employed). In contrast, a single service-sector SIC, "general medical and surgical hospitals" accounts for the employment of 2.3 million people.

There is no reason why all the SIC categories should be of comparable size. However, the present imbalance between great detail for much of manufacturing and lack of detail for many service industries -- especially those that have grown most rapidly -- presents a severe impediment to industrial analysis.

Revising the SIC

The importance of an SIC revision is generally recognized. Revision, however, is a complex and expensive undertaking. A proposed revision was prepared in 1981, but, in the budget-cutting atmosphere of 1981 and 1982, funds were not available for implementation.3/ Preparation of a new revision is now almost complete, but new budget-cutting requirements could again prevent implementation.

Of particular concern is the prospect that some agencies may proceed with implementation while others lack the funds to do so. The Bureau of Labor Statistics, for example, has included no funds for SIC revision in its FY1987 budget request. Implementation of the revision by some but not all agencies could result in a protracted period for which comparability among data series would be lacking. Inventory and sales data from the Census Bureau, for example, might be tabulated using the new definitions, while price and employment data from BLS would still be on the old basis.

Why is revising the SIC so expensive? One reason is that, while users of industrial data need up-to-date classifications, they also need to be able to make historical comparisons. Revision of the SIC categories impairs the comparability of the new data with that for prior years. To overcome this difficulty, the introduction of SIC revisions is normally accompanied by publication of transition year data on both the old and new bases and/or by retabulation of selected historical data on the new basis.

The costs of providing for historical comparability can be contained by avoiding minor or purely cosmetic SIC reclassifications. The proposed revisions have recently been made available for public comment.4/ Scrutiny is desirable, both to see if the needed changes are proposed and to see that all the proposed changes are in fact necessary.

Another and more expensive aspect of implementing an SIC revision is the "coding" of individual businesses into the proper SIC categories. Information about type of business activity must be obtained from each business establishment so that the establishment can be assigned to the correct SIC category. Since variations in type of business activity are virtually limitless and since a single business establishment may often engage in more than one type of activity, coding is a difficult and sometimes arbitrary process.5/

At present, the Census Bureau and BLS, the two principal agencies conducting business surveys, each do their own coding of the businesses from which they obtain information. These separate coding activities not only are costly but also can reduce data comparability since a certain number of establishments inevitably will be placed in different industries by different agencies.

The Census Bureau plans to accomplish its assignment of business establishments to new SIC categories in conjunction with the 1987 economic censuses, during which it will be obtaining comprehensive information on the activities of each establishment. BLS, however, can obtain the information needed to recode the business establishments from which it obtains data only by carrying out a costly special survey. The BLS survey might be partially or totally unnecessary if BLS and Census Bureau recoding could be combined into a joint operation. A joint operation would not only save money, but also improve data quality by assuring uniform coding.

A variety of possibilities for a cooperative activity exist. It could cover all businesses or be limited to, say, larger corporations. The work could be done by the Census Bureau and the results made available to BLS or staff from both agencies could work with economic census data. At present, such joint activities are limited by the confidentiality provisions of the Census statute and the tax code (since the Census Bureau obtains some data from tax returns). Both statutes prohibit the Census Bureau from disclosing any individually identifiable information about a business even for confidential use by another statistical agency.

Although some increased cooperation among agencies may be possible under current law, legislation providing for limited sharing of data would be needed to permit a full joint operation. Such an exemption would present no threat to confidentiality. It would be limited to the information needed for coding and would permit access to confidential data only by career employees of statistical agencies dedicated to safeguarding confidentiality.

IV. DEFINING INCOME AND POVERTY

Information about the income and wealth of U.S. households is being considerably expanded by the new Survey of Income and Program Participation (SIPP). Obtaining the full benefit of this new information, in conjunction with that already available from established sources, will require resolution of several difficult definitional issues. These include:

1. How should income be defined for statistical purposes? In particular, should some noncash benefits be included? If so, which ones? How should they be valued?
2. Should the definition of poverty be changed? If so, what considerations should enter into the new definition?

These questions, although they can be discussed sequentially, are interrelated and the answers should be developed together. An important set of procedural questions concerns who should be involved in reviewing current definitions and deciding on changes.

Definitions of Income

Data on income and wealth are available from several established sources. Major ones include:

-- the Decennial Censuses, source of the most detailed geographic data;

-- the Census Bureau's annual March Current Population Survey;

-- BEA's personal income estimates, available monthly for the Nation and annually for States and counties;

-- IRS Statistics of Income, compiled from tax returns; and

-- occasional Consumer Finance Surveys conducted by the Federal Reserve, a primary source of information on the distribution of wealth.1/

To these have now been added the new SIPP program. SIPP data are filling several important information needs not met by other sources. First, the SIPP gathers detailed information on federal program participation and other sources of noncash income. Second, it gathers household asset data on a regular basis, greatly expanding the analyst's ability to look jointly at income and wealth. Finally, since the same household is surveyed several times over a 2 1/2-year period, the data can be used to analyze how a household's economic well-being changes over time. The impact on economic well-being of events such as unemployment, marriage, divorce, or departure of adult children from the household can be examined.2/

Each of the above data sets was developed for its own important uses, and each uses a different definition of income. Use of different definitions is not necessarily inappropriate, but their multiplicity can be confusing even for the knowledgeable data user, especially since no comparison of the different definitions is readily available. A look at the differences between the income definition used in the Census Bureau's Current Population Survey and that used by BEA to define personal income illustrates the problem.

BEA and Census Bureau Income Definitions. For 1983, BEA estimates average per capita personal income at $12,091, while the Census Bureau's CPS estimate is $9,494.

BEA makes aggregate estimates and divides by population to obtain per capita amounts, while the Census Bureau surveys a sample of households, thus obtaining data on the incomes of different kinds and sizes of households as well as per capita averages. Part of the difference between the Census and BEA per capita estimates arises from this basic difference in approach and other differences in estimating techniques and from sampling error and other statistical factors, but much of it is traceable to definitional differences.

The Census Bureau includes only money income in its estimate (although it collects and separately publishes data on a number of noncash benefits). BEA's personal income figures include many important types of noncash income: pension rights, employer-provided health and life insurance, food stamps, Medicare and Medicaid payments, imputed rent on owner-occupied houses, imputed interest income and others.3/

The extent to which the familiar BEA personal income figures include both publicly- and privately-provided noncash benefits probably is not widely recognized, and, for all the recent discussion of noncash government benefits received by lower income households, the privately-provided benefits received by middle and upper income households have received limited attention.

Valuing Noncash Income. What to include in income and what to leave out is a complex and controversial question. Another difficult question is how to place a value on noncash benefits. Do recipients place exactly the same value on a dollar's worth of food stamps, rent subsidy, or employer-provided life insurance as on a dollar in cash? Probably not. Recognizing this, the Census Bureau has utilized several alternative valuation approaches in studies of noncash benefits.4/

In general, a dollar of cash is worth more to the recipient than is a dollar's worth of an in-kind benefit, which may or may not meet the recipient's most urgent need. But how much more? One valuation approach gives in-kind benefits their full market value (i.e. one dollar of rent subsidy is worth one dollar). A second, called the recipient value approach, values benefits at the amount of cash a recipient would accept in exchange for the benefit. Economists regard the recipient value approach as conceptually superior to valuing in-kind benefits at their full market price. Measurement problems raise questions about use of recipient value in practice, however. Participants in a recent Census Bureau conference on valuation of noncash benefits generally expressed doubt about the near-term prospects of obtaining satisfactory measures of recipient value.5/

Definition of Poverty

The U.S. government presently uses a fixed definition of poverty developed in the early 1960s. Survey data gathered in 1955 had shown that a family of three or more spent approximately one-third of its income on food. The poverty line for families of three or more therefore was set at three times the cost of the Agriculture Department's Economy Food Plan. For smaller families and individuals living alone, food cost was multiplied by a somewhat higher factor.6/ Since 1964 this definition has remained basically unchanged except for annual updating to take account of changes in price levels.7/

The poverty standard developed in 1964 was an attempt to express statistically the U.S. social consensus of that time about what constituted basic economic need. Maintenance since then of this fixed standard has facilitated measurement of society's success in providing families with the income required to satisfy these predefined needs. For a time this success was considerable. The percent of the population in poverty fell from 22 percent in 1959 to 11 percent in 1973. From 1973 through 1979 the poverty rate showed little change, however, and since then it has risen.

In a growing economy, in which average incomes are rising, social concepts of basic needs also change. The fixed poverty standard, useful as it is for comparison over limited periods of time, gradually becomes outdated. In 1959, the poverty standard for a family of four was 49 percent of the median income for all families of that size. By 1973 it had fallen to 33 percent, where it has remained except for temporary upturns during recessions.8/

As the gap between the poverty standard and the median income has widened, the poverty standard increasingly has been perceived as an inadequate measure of basic need. Evidence that Congress has viewed it as inadequate is found in the introduction into legislation governing various social programs of the concept of the near-poor, that is, those with incomes below 125 percent of the poverty standard. This, too, is a fixed standard, however, ultimately tracing back to the average income share spent on food in the mid-1950's.

The poverty definition in use since 1964 is based on before- tax money income. In the early 1960s nonmoney income was a relatively minor part of the total, and taxes (especially payroll taxes) paid by the poor were much lower than today. Since then, noncash income has grown dramatically in importance, not just for the poor, but throughout the income spectrum, and today's poor families often must pay $1,000 or more in federal taxes.9/

Noncash Benefits. Estimates of the number of people below the fixed poverty standard including and excluding noncash benefits demonstrate the role of noncash income in helping to alleviate material deprivation. Receipt of noncash benefits lifted almost 5 million people above the fixed poverty line in 1984 according to the Census Bureau's studies, and, of course, raised the standard of living of many who remained below that line.10/ It does not follow, however, that an income concept which includes in-kind benefits shows the poor to be in a better position relative to the rest of the population than does the money income concept.

The poor are not the major recipients of in-kind benefits. It is workers with good jobs who receive paid vacations, employer-provided health and life insurance, and pension benefits. Medicare benefits are available to almost everyone over age 65, regardless of income. Those near the top of the income distribution often receive additional noncash benefits: stock options, expense accounts, and tax shelters for their spare income. If a comprehensive analysis of the distributional effects of inkind benefits were available, it might well show a wider gap between the poor and the median than do the present data on money income.

Taxes and Transfers. In 1959, the income tax threshold for a family of four was 10 percent below the poverty level, and many of the poor paid taxes. During the 1960's and 1970's tax laws were repeatedly adjusted to reduce federal income taxes paid by the poor. Introduction of the earned income tax credit in 1975 had the largest single effect, raising the tax threshold well above the poverty level, where it remained through 1980.

Tax cuts enacted in the early 1980's made little change in the three provisions that particularly affect the tax status of the poor: the personal exemption, the minimum standard deduction, and the earned income tax credit. Thus by 1982, inflation had again pushed more of the poor into tax-payer status. In 1982, 7.6 percent of poor families paid federal income tax, compared to 6.5 percent in 1981 and only 4 percent in 1980.11/

Payroll taxes paid by the poor are substantially greater than income taxes. Forty-two percent of poor households paid payroll taxes in 1982. Typical families with earnings at the poverty level could have paid from $500 to $1,400 in Federal income and payroll taxes that year, with the amount generally increasing with family size.12/

Different segments of the poverty population are affected quite differently by federal spending and taxing. The aged poor receive 85 percent of their income from Social Security and Supplemental Security Income and pay little in federal taxes. Most families receiving public assistance also pay little tax. However, 5.5 million poor families had earned income in 1982. About fifteen percent of these households paid federal income tax and 90 percent of them paid payroll taxes.13/ In general, the poor with substantial earnings benefit least from assistance programs and pay the most in taxes. The tax and transfer system redistributes income among the poor as well as to the poor.

The Need for New Definitions

Definitions of income and poverty require basic reconsideration. The current definition of family income, which leaves out noncash income, is unsatisfactory in an age in which such benefits have become important for all income groups. To incorporate only selected government benefits into income primarily for purposes of estimating poverty, as has sometimes been suggested, would be a patching up of outdated concepts that would create more problems than it solves. The concept of poverty used since 1964 is based on views about the money income needed to reach what was viewed as a minimum adequate standard of living in 1964. The expansion since then of publicly- and privately-provided noncash benefits received by households throughout the income spectrum makes 1964 concepts outmoded.

An updated concept of poverty not only should be developed in the context of an income definition incorporating publicly- and privately-provided noncash benefits but should allow for measurement of the role of government in alleviating poverty. That is, there is need for estimates of the numbers in poverty both before and after paying taxes and receiving government transfers (cash and noncash). Presently available statistics use pre-tax income, incorporate cash assistance and leave out noncash assistance. They provide neither a pre- nor post-tax and transfer measure of poverty.

Objectives of a review of income and poverty definitions should include:

1. Developing an income concept that provides a consistent standard for including publicly- and privately-provided noncash benefits in the statistical definition of income.
2. Reviewing methods of valuing noncash benefits from the perspectives of conceptual adequacy and practicality of measurement.
3. Updating the basic standard of need used in the poverty definition. The present fixed poverty standard is based on purchasing patterns of 1955, when the average family spent one-third of its income on food. Today the proportion is less than 20 percent.
4. Developing criteria for publishing estimates of income distribution and poverty before and after taxes and government benefits are taken into account. The relevant question for policy analysis is not whether government assistance is received as cash or noncash benefits but what is the net effect on incomes of government taxing and spending.

5. Developing criteria for presenting longitudinal data on income and poverty. Surveys following the same individuals over a period of years show substantial movements in and out of poverty. Nearly 25 percent of the population experienced poverty at some time between 1969 and 1978. Most of this poverty was temporary, often associated with such changes in family circumstances as divorce or death of a principal wage earner. However, 2.6 percent of the population was persistently poor (i.e., poor in at least eight of the ten years analyzed).14/ Among the questions that need addressing are what time dimension to introduce into definitions of poverty and how best to present statistical information on the persistence of poverty.

Useful definitions of income and poverty must stem from a social consensus about what constitutes economic well-being and what defines a minimum adequate standard of living. Such decisions cannot appropriately be made either within the individual statistical agency or solely through the OMB standard-setting process. One means of obtaining the broader perspective needed would be a governmental task force including participants from congressional entities. Another might be appointment of an outside commission.

V. STATISTICAL BUDGETS

The previous four sections have presented specific examples of recent problems with the quality and timeliness of economic statistics, problems ranging from belated introduction of a computer price index to the need to update definitions of poverty. Each of these examples helps illustrate a single theme: the failure to update statistical measurement systems to reflect changes in the structure of the economy.

No statistical system could be so perfect that it would always keep up with the rapid pace of change in a modern economy. In recent years, however, the examples of outdated statistics have become disturbingly numerous and have taken too long to correct. The causes of such statistical obsolescence include budgetary restrictions and the difficulties of coordinating a program which is spread among a number of different government agencies.

The budgetary problems faced by the statistical agencies over the past decade have not been simply problems of inadequate funding. The damaging effects of inadequate funding have been compounded by frequent and prolonged uncertainties about funding levels and by a variety of restrictions that hamper program managers in making efficient use of available funds. The sequestration procedures currently being applied to 1986 budgets under the Balanced Budget and Emergency Deficit Control Act (better known as Gramm-Rudman-Hollings or GRH) present a particularly severe example of the problems of uncertainty and restrictive rules and regulations. These various aspects of the budget problem are described below.

Budget Trends 1978-1986

During the past decade the labor force has grown over 20 percent, real GNP has risen by nearly one-third, and import volume has risen more than 90 percent. These figures illustrate the growth of the workload faced by the statistical system, as measured by the size and variety of the economic phenomena to be measured.

The variety of important uses to which economic statistics are being put also has grown. They are used to prepare increasingly detailed and sophisticated econometric forecasts, including the forecasts which enter into the budget projections required by GRH. Economic statistics also have become widely used to help determine federal tax and spending levels. The Consumer Price Index (CPI), for example, is now used to index personal income tax brackets and exemptions as well as programs accounting for more than one-third of federal spending.1/

While workload has risen and new demands for statistical measures have emerged, spending on economic statistics has remained constant or declined. As shown in the accompanying table, inflation-adjusted budget authority for the Bureau of Labor Statistics, the Bureau of Economic Analysis and the Census Bureau's current programs declined from 1979-1982, by amounts ranging from 6 percent at BEA to 15 percent at the Census Bureau. Some restorations were subsequently made, so that, in 1985, the BEA and BLS budgets had roughly regained their 1979 level. Spending on Census Bureau current programs (i.e. programs other than the population and business censuses) has risen more rapidly since 1982 because of the introduction of the SIPP program. 1985 spending on current programs other than SIPP remained significantly below 1979.

Even without the sequestration requirements of Gramm-Rudman-Hollings, estimated 1986 inflation-adjusted spending by the BLS would be below 1985. With the sequestrations, budgets for the Census Bureau, BLS and BEA all will be reduced 1985 to 1986, with the amounts ranging from 1 percent at BEA to 6 percent at BLS.

Spending by three other important contributors to economic statistics, the Department of Agriculture's Statistical Reporting Service, the Statistics of Income Division of the Internal Revenue Service, and the Energy Information Agency also declined during the first half of the 1980s. A complete tabulation of spending on economic statistics by the many agencies that contribute key elements to the total program is outside the scope of this study. Other, more

Budget Authority for Major Statistical Agencies, Fiscal Years 1978-1987*
(millions of constant 1982 dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986		1987
									as enacted	with GRH	
Census Bureau current programs**	65.9	65.6	63.2	60.9	57.2	64.6	70.1	75.1	77.2	73.8	75.3
SIPP		1.2	1.2	1.4	.0	2.6	10.8	13.9	17.2	16.4	16.8
Other current programs	65.9	64.5	62.0	59.5	57.2	62.0	59.3	61.2	59.9	57.4	58.6
Bureau of Labor Statistics**	116.0	122.0	121.1	118.2	113.1	117.1	118.9	124.2	122.2	116.9	119.9
Bureau of Economic Analysis**	19.5	19.0	18.6	18.2	18.0	18.4	18.9	19.1	19.8	18.9	18.6
Statistics of Income Div, IRS	19.1	18.3	17.2	15.5	16.4	14.1	16.5	17.2	13.0	12.5	13.0
Stat Reporting Serv, USDA***	55.8	55.7	57.6	57.2	51.6	49.9	50.7	52.7	51.4	49.2	50.3
Energy Information Administrat'n	N/A	N/A	106.8	96.2	78.9	54.3	52.6	55.1	52.7	50.5	50.3

* See Appendix for sources and derivation of figures.

** Excludes certain transfers not affecting total program level for economic statistics. Also excludes CPI revisions from the BLS totals. See appendix for details.

*** Obligations.

N/A = not available

comprehensive studies have in general shown a declining pattern, however.2/

The statistical agencies are not alone. Over the past decade, constant or declining spending levels have been typical of many civilian government programs. Nondefense federal purchases (excluding the Commodity Credit Coroporation) make up only 8 percent of federal spending. Included in this category are law enforcement, park and forest management, scientific research, air traffic control, and many other established government activities. While larger categories such as defense spending, social security, and interest payments have grown rapidly, many of these civilian programs have been squeezed in the hope of thereby solving the problem of mounting federal deficits.

These civilian activities are small relative to total federal spending. Nondefense federal purchases (excluding the CCC) were $82 billion in 1985 while the deficit was $197 billion. Spending on statistical programs, by the broadest measure provided in OMB analyses, totaled $1.4 billion in FY1985 or less than one-half of one percent of the total federal budget.3/ Thus budget cuts in statistical programs and other federal nondefense purchases have had little impact on the overall fiscal environment, but they have often had major impacts on the programs themselves. Some effects have been salutary; obsolete or unnecessary programs have been eliminated and operating efficiencies have been introduced. In other cases, however, service levels have been reduced or important program improvements -- even cost saving ones -- postponed.

The Impact of Budget Uncertainty

Federal program managers have become accustomed to operating in an atmosphere of budget uncertainty. Only rarely in recent years have all appropriations been enacted before the fiscal year began. Some agencies have experienced several consecutive years of operation under continuing resolutions.

Often this budget uncertainty prevents agencies from committing funds to the development efforts needed to modernize and update activities. Maintenance of basic continuing programs such as the regular GNP, employment and price estimates must be given first priority. Other, less visible activities are put on "hold" until budget uncertainties are resolved. This does not necessarily mean that such activities are abandoned, but the "on-again, off-again" process delays completion of projects and, over time, leads to loss of interest in program improvement, loss of qualified staff, and general attrition of research capability.

1986 Budgets: Gramm-Rudman-Hollings

The current budget year has been marked by greater than usual uncertainty about budget levels. About one-third of the way into the year, agencies were notified that budgets for each program and activity must be cut 4.3 percent under the sequestration provisions of GRH. As of this writing, such sequestration has been ruled unconstitutional but will remain in effect pending the outcome of an appeal to the Supreme Court. Program managers may not know until the fiscal year is almost over whether sequestration will be imposed or whether their particular agency may be subject to larger or smaller budget cuts achieved in other ways or to no cuts at all.

For the time being, agencies must operate on the assumption that the GRH cuts must be achieved. The range of actions available to achieve immediate budget cuts like these is severely restricted. The bulk of most statistical agency budgets consists of personnel costs, and these are difficult to reduce quickly. Dismissal of employees can actually add to immediate costs because of severance pay requirements and other separation expenses. Furloughing personnel is generally viewed as an unattractive last resort because of the program disruptions, the financial hardship for employees, and the impact on employee morale.

Management flexibility is severely limited by the requirement that proportionate cuts be made in each program or activity. Some statistical agencies divide their budgets into a number of separate activities, some of them quite small. Thus agency management may have very limited discretion to concentrate cuts where they are judged to do least harm. Cuts fall equally on efficiently and inefficiently managed programs, destroying incentives to manage programs efficiently. In some cases, enduring damage to program quality, seemingly out of all proportion to the small amounts of money saved, will result from sequestration.

The impact of the 1986 sequestration can be illustrated by examining the BLS budget. BLS must cut its 1986 budget by $8,382,000 ($6,821,000 in general funds and $1,561,000 from trust funds), divided as follows among program areas:

Labor Force Statistics	$3,955,000
Prices and Cost of Living	2,295,000
Wages and Industrial Relations	805,000
Productivity and Technology	221,000
Economic Growth and Employment Projections	146,000
Executive Direction and Staff Services	320,000
Consumer Price Index Revision	642,000 4/

To achieve the required saving in the CPI revision program, BLS plans to reduce the number of cities in which data for the revised CPI are collected by 15 percent (from a planned 91 to only 77). This reduction in sample size will prevent a planned 22 percent reduction in the variance of CPI estimates from being achieved.

As noted, the CPI is used to index federal taxing and spending. BLS estimates that each 1 percent increase in the CPI has a $4.6 billion impact on the federal budget. A more accurate CPI would increase the probability that the tax and spending changes triggered by the CPI are being triggered by actual price changes of the reported size. BLS estimates that, at current rates of inflation, the statistical uncertainty surrounding the fiscal impact of the CPI will be $100 million greater with the 77 city CPI sample than it would be if the planned 91 city sample could be implemented.5/ Comparison of this large impact to the $642,000 saving from cutting sample size illustrates how a small budget cut, imposed in an arbitrary way, can sometimes have large -- and doubtless unintended -- impacts.

Other program reductions planned by BLS to meet sequestration requirements include:

- -- suspending publication of employment, hours and earning estimates for approximately 75 metropolitan areas;
- -- postponing planned cooperative efforts to help states improve SIC coding activities, a postponement that may delay planned 1987 SIC revisions (see Section III);

- -- reducing industry detail or delaying collection of occupational employment statistics;
- -- postponing planned work to develop price measures and employment cost indices for additional service industries;
- -- deferring a planned study of the employment impact of changes in defense spending.6/

This is only a partial list of specific actions BLS plans to take to meet GRH requirements. Other statistical agencies must undertake similar cuts and postponements.

1987 Budgets

The administration's budget request for FY1987 would continue the 1985-86 pattern of declines in inflation-adjusted budget authority for BLS, BEA, and the Census Bureau's current programs (other than SIPP). These budget requests are, of course, subject to congressional review and revision. They also are subject to the new uncertainties created by GRH. The sequestration required by GRH if deficit reduction targets are not otherwise met is presently under legal challenge. The alternatives Congress may adopt if the Supreme Court finds sequestration unconstitutional and the impacts these alternatives might have on individual agencies' 1987 budgets is not known. The considerable possibility of cuts from the administration's recommendations must be recognized, however.

The FY1987 budgets proposed by the Administration for the Census Bureau, BLS, and BEA contain some items identified as program increases. These would be largely, though not entirely, offset by proposed program decreases. Most of the increases are to cover costs of routine program maintenance rather than to fund improvements, however, whereas the decreases would mean reductions in the amount of information available about the economy.

Proposed Program Increases. The Census Bureau plans one small program expansion ($350,000) for 1987. It is a continuation of efforts to improve data for the service sector and would provide for surveying additional service industries. Some of the industries to be added are in the transportation sector, and the data collected would replace data once collected by the Civil Aeronautics Board or the Interstate Commerce Commission. Thus part of this proposed program increase is needed just to maintain or restore the existing information base.7/

Census is also requesting $600,000 to maintain the new harmonized international trade data system (See Section II). These funds are needed simply to maintain the quality of the trade classification system as additional classifications are added by international agreement and to keep the export and import categories compatible with one another and with those of other countries.

The BLS budget contains three proposed increases. One, essentially a housekeeping measure, would cover the cost of strengthened security measures to prevent unauthorized pre-release access to the CPI ($500,000). Tighter security is thought necessary because futures contracts based on the CPI now are traded in commodity futures markets, creating the possibility of large private gain from pre-release access to CPI estimates.

The second BLS proposal is to expand the survey of Professional, Administrative, Technical and Clerical (PATC) pay ($2,062,000). This expansion was recommended by the Cabinet Council on Management and Administration to provide better information on which to base recommendations on federal pay.

The third BLS proposal is for $1,347,000 to improve management of the BLS business establishment list and to begin developing longitudinal data about business establishments. This longitudinal data base will permit tracing over time of employment changes within a given business establishment, providing a new kind of information on the factors associated with employment growth and decline.

Finally, the Bureau of Economic Analysis is asking for a $750,000 addition to its budget to pay the Internal Revenue Service for tax return tabulations. These funds would be used entirely to finance restoration of cuts in the IRS tabulation program and are simply a transfer of costs from one agency to another.

Program Decreases. At the same time that BLS is proposing to increase spending on its list of business establishments, the Census Bureau is proposing to save $1,000,000 by cutting back on the surveys needed to update the Standard Statistical Establishment List (SSEL). Like the BLS business list, the SSEL is a list of all business establishments, used as a sampling frame for business surveys. The SSEL contains each businesses name, address, and SIC designation and codes indicating the employment and sales size classes into which the establishment falls. The proposed budget cut would reduce the accuracy of the SSEL.

A proposed $400,000 cut in the Census Bureau budget would reduce coverage of the Quarterly Financial Report, eliminating data on small retail, wholesale, and mining companies. This same reduction was proposed for 1986, but was rejected by Congress.

BLS proposes saving $4,785,000 in its 1987 budget by eliminating the Permanent Mass Layoff and Plant Closings program, $1,366,000 by reducing the detail provided about local area employment, and $900,000 by reducing its occupational employment statistics program.

In 1984, Congress instructed BLS to develop ways to improve data available about plant closings and mass layoffs, and since then BLS has been working with the States to develop a cooperative data collection program. The Administration has consistently recommended cancellation of this program, however, arguing that, given the economic recovery, the need for collection of this information does not justify its substantial cost.

BLS justifies proposed reductions in spending on occupational employment statistics and local area employment detail on the grounds that these are lower priority programs, the elimination of which will offset budget increases essential for higher priority BLS programs. The exact nature of the proposed cuts remains to be worked out in consultation with cooperating state agencies.

Analysis of Proposed Changes. Of the proposed 1987 budget increases only two -- the Census Bureau's expanded service industry coverage and BLS' work on a longitudinal business data file -- represent initiatives to improve general purpose economic statistics. The other increases are to fund either the increased costs of maintaining existing programs or, in the case of the PATC survey, a special purpose program needed to help administer the federal government itself. In the case of business lists, one agency is increasing its investment while another is cutting back. Legal obstacles prevent the two agencies from engaging in a more efficient joint effort.

Several proposed cuts -- elimination of the Permanent Mass Layoff and Plant Closing Program, reduced coverage of the Quarterly Financial Report, and unspecified reductions in occupational employment statistics and local area employment information -- represent reductions in available information about the economy. In the Administration's judgement these are lower priority programs, elimination of which is required as part of the overall effort to control federal spending.

Judgments may, of course, differ as to the relative importance of various statistical programs. It seems inescapable, however, that, if the total budgets of these three agencies are to be held to the levels proposed for 1987, some programs will have to be eliminated or cut back. After a decade of continuously tight budgets, there is little room left for absorbing further cuts through increased efficiency or greater attrition of general research and development efforts.

Business Lists. Some statistical operations are conducted inefficiently because confidentiality laws limit the extent to which agencies can share information such as business lists and SIC designations of establishments.8/ Such inefficiency can be ill-afforded when already strained budgets for 1987 and subsequent years may be cut further in order to achieve deficit reduction targets.

The Census Bureau's SSEL was originally funded and developed with the intent of making it available for use by other major statistical agencies that conduct business surveys. Sharing of this comprehensive list of business establishments was intended to improve data comparability, because survey samples drawn from a single list would eliminate variations in the industry assignments of individual firms. It also was intended to spare other statistical agencies the expense of maintaining their own lists of establishments.9/

To date, this intent has been thwarted by the protracted failure to enact legislation allowing other statistical agencies to use the SSEL.

Unable to use the SSEL, BLS has proceeded to make a large investment in its own list of businesses. The respective strengths and weaknesses of the BLS and Census Bureau lists are not fully known because the confidentiality laws impede comparison. However, it is widely thought that that Census Bureau's SSEL may have better information about large corporations, while the BLS list may be as good or better for small firms.

Legislation enabling BLS and Census to compare their lists and to develop and maintain a joint list drawn from the best parts of each would save money and improve data quality. Logically, such an effort would be combined with joint implementation of a revised SIC code. Legislation permitting these joint activities would be an important contribution to a better statistical system and an especially appropriate step at a time when the need to achieve operating efficiency is so great. It would present no threat to confidentiality. The information shared would be quite limited and would be available only to employees of statistical agencies dedicated to safeguarding confidentiality.

APPENDIX: BUDGETS FOR SELECTED STATISTICAL PROGRAMS

Table 1A shows budget levels in current dollars for five agencies that are important producers of economic statistics and for the Statistics of Income (SOI) Division of the Internal Revenue Service. Figures are for budget authority except those for SOI, which are obligations.

Budget authority for the Census Bureau is divided into two appropriations. The Salaries and Expenses appropriation, referred to as Current Programs in the tables, covers the Bureau's monthly and annual surveys and most other current activities. The Periodic Programs appropriation, referred to as Population and Economic Censuses in the table, covers the cost of these decennial and quinquennial censuses and related activities. The cost of periodic programs varies with the stages of the census cycles, so that year to year comparisons are difficult to interpret. This study's discussion of Census Bureau budget trends is limited to the appropriation for current programs.

Appropriations for the Census Bureau, the Bureau of Labor Statistics and the Bureau of Economic Analysis have been adjusted to exclude certain transfers. These transfers represent continuations of ongoing statistical programs either in new locations or under new funding arrangements. They do not represent additions to the statistical program as a whole. The adjustments are shown in the table.

Additional transfers of trust funds to BLS to cover the costs of certain Federal-State cooperative programs are not shown in the table. Again, however, these transfers do not represent program additions.

Although not budgeted in a separate account, the BLS item for revision of the Consumer Price Index is a periodic program. It has been excluded from the BLS total for purposes of analyzing budget trends.

The Survey of Income and Program Participation (SIPP) is the largest new program introduced at any of these three agencies during the time period shown. The budget for SIPP is shown separately, and the total for Census Bureau current programs is shown both with and without SIPP.

No adjustments for transfers or other special items have been made in the budgets for SOI, the Energy Information Agency (EIA), or the Agriculture Department's Statistical Reporting Service (SRS). Large reductions in the EIA budget between 1980 and 1983 represent in part the completion of certain one-time activities. Analysis of the EIA budget is beyond the scope of this report, however. Because the budgets for these three agencies have not been adjusted for transfers and because important economic data is produced in many agencies not shown in the table, the sum of the six agency budgets shown here does not represent a valid total for economic statistics.

The budgets for these six agencies, adjusted as described above, have been converted to constant 1982 dollars using the GNP deflator for nondefense federal purchases other than the Commodity Credit Corporation. Estimated deflators for FY1986 and 1987 have been obtained by assuming that the costs of nondefense federal purchases would rise at the same rate as that forecast by the Administration for the overall GNP deflator in the _Budget of the United States Government: FY 1987_, released in February 1986. The deflators used and the constant dollar estimates obtained are shown in Table A2, which is the basis for the table included in Section V of the text of this study.

The deflator for nondefense federal purchases other than the CCC is a measure of the average rate of cost increase experienced for direct federal nondefense purchases of goods and services. Individual agency's experience may vary from this average, depending on whether the program is more or less labor intensive, the extent of contracting with the private sector, the cities in which offices are located and many other factors.

Sources. For the five agencies shown, budget authority for FY1978 through 1984 was taken from the Congressional Research Service study _An Update on the Status of Major Federal Statistical Agencies, Fiscal Year 1986_. (See footnote 1 for full citation). FY 1985 budget authority, 1986 estimates, and 1987 requests were taken from the February 1987 administration budget submission. SOI does not have a separate appropriation. SOI budget obligation figures were obtained from IRS. For most agencies, the amounts to be sequestered in 1986 under the Gramm-Rudman-Hollings provisions are shown in the administration's budget. For those not so shown, a 4.3 percent reduction was assumed. The deflators used for FY1978-85 were obtained from BEA. 1986 and 1987 estimates are by the author.

Table Al: Budget Authority for Major Statistical Agencies, Fiscal Years 1978-1987
(millions of current dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986 as enacted	1986 with GRH	1987
Census Bureau:											
Current programs	47.7	51.0	53.7	57.2	57.2	69.2	77.4	85.3	90.4	86.5	91.7
Quarterly Financial Report						1.6	1.6	1.6	1.6	1.5	1.6
Other program transfers						.5	.6	.6	.6	.6	.6
Other current programs	47.7	51.0	53.7	57.2	57.2	67.1	75.2	83.1	88.2	84.4	89.5
SIPP		.9	1.0	1.3	.0	2.7	11.6	15.4	19.7	18.8	19.9
Current programs, ex SIPP	47.7	50.1	52.7	55.9	57.2	64.4	63.6	67.7	68.5	65.6	69.6
Population & economic censuses	83.1	201.9	666.5	177.9	87.9	98.9	78.2	81.0	105.6	101.1	185.6
Bureau of Labor Statistics	84.0	94.8	102.9	111.1	113.1	121.7	137.3	152.9	158.6	151.8	159.4
Transfers from ETA							5.3	5.8	5.8	5.6	5.8
CPI revision							4.5	9.7	13.2	12.6	11.1
Other programs	84.0	94.8	102.9	111.1	113.1	121.7	127.5	137.4	139.7	133.6	142.5
Bureau of Economic Analysis	14.1	14.8	15.8	17.1	18.0	19.1	21.0	21.8	23.3	22.3	23.5
Transfers							.7	.7	.7	.7	1.5
Other programs	14.1	14.8	15.8	17.1	18.0	19.1	20.3	21.1	22.6	21.6	22.1
Statistics of Income Div, IRS	13.8	14.2	14.6	14.6	16.4	14.7	17.7	19.0	14.9	14.3	15.5
Statistical Reporting Serv, USDA	40.4	43.3	49.0	53.8	51.6	51.8	54.4	58.3	58.7	56.2	59.7
Energy Information Administrat'n	N/A	N/A	90.8	90.4	78.9	56.4	56.4	60.9	60.3	57.7	59.7

Table A2: Budget Authority for Major Statistical Agencies, Fiscal Years 1978-1987
(millions of constant 1982 dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986		1987
									as enacted	with GRH	
Census Bureau current programs*	65.9	65.6	63.2	60.9	57.2	64.6	70.1	75.1	77.2	73.8	75.3
SIPP		1.2	1.2	1.4	.0	2.6	10.8	13.9	17.2	16.4	16.8
Other current programs	65.9	64.5	62.0	59.5	57.2	62.0	59.3	61.2	59.9	57.4	58.6
Bureau of Labor Statistics*	116.0	122.0	121.1	118.2	113.1	117.1	123.1	133.0	133.7	128.0	129.3
CPI revision							4.2	8.8	11.5	11.0	9.3
Other current programs	116.0	122.0	121.1	118.2	113.1	117.1	118.9	124.2	122.2	116.9	119.9
Bureau of Economic Analysis*	19.5	19.0	18.6	18.2	18.0	18.4	18.9	19.1	19.8	18.9	18.6
Statistics of Income Div, IRS	19.1	18.3	17.2	15.5	16.4	14.1	16.5	17.2	13.0	12.5	13.0
Statistical Reporting Serv, USDA	55.8	55.7	57.6	57.2	51.6	49.9	50.7	52.7	51.4	49.2	50.3
Energy Information Administrat'n	n.a	n.a.	106.8	96.2	78.9	54.3	52.6	55.1	52.7	50.5	50.3
Deflator, nondefense federal purchases, ex CCC	.724	.777	.850	.940	1.000	1.039	1.072	1.106	1.143	1.143	1.188

* Excludes certain transfers, see Appendix text.

NOTES

Introduction

1. See:

1) U.S.General Accounting Office, *Status of the Statistical Community After Sustaining Budget Reductions,* GAO/IMTEC, 84/17, July 18, 1984;

2) Daniel Melnick, "Recent Changes in the Statistical Activities of the Federal Government," Congressional Research Service, The Library of Congress, June 1982, reproduced in U.S. House of Representatives, Committee on Government Operations, *Federal Government Statistics and Statistical Policy,* Hearing, June 3, 1982;

3) U.S. House of Representatives, Committee on Post Office and Civil Service, Subcomittee on Census and Population, *Impact of Budget Cuts on Federal Statistical Programs,* Hearing, March 16, 1982;

4) U.S. Congress, Joint Economic Committee, *Maintaining the Quality of Economic Data,* November 27, 1981;

5)________, *Statistics for Economic Analysis: 1983 Budge Requirements*, July 19, 1983;

6) Congressional Research Service, Library of Congress, *The Federal Statistical System, 1980 to 1985*, Committee on Government Operations, U.S. House of Representatives, November 1984;

7)________, *An Update on the Status of Major Federal Statistical Agencies, Fiscal Year 1986*, Committee on Government Operations, U.S. House of Representatives, May 1985;

8) U.S. Office of Management and Budget, Office of Information and Regulatory Affairs, Statisical Policy Office *Principal Federal Statistical Programs*, for fiscal years 1983, 1984, 1985, and 1986, issued in March 1982, April 1983, April 1984, and June 1985 respectively.

Section I

1. Descriptions of various aspects of the recent GNP revisions may be found in:

1) Gerald F. Donahoe, "The National Income and Product Accounts: Preliminary Revised Estimates, 1977," *Survey of Current Business* 64, May 1984, pp. 38-41;

2) U.S. Department of Commerce, Bureau of Economic Analysis, "An Advance Overview of the Comprehensive Revision of the National Income and Product Accounts," Survey of Current Business 65, October 1985, pp. 19-28;

3) ________, "Revised Estimates of the National Income and Product Accounts of the United States, 1929-85: An Introduction," Survey of Current Business 65, December 1985, pp. 1-19.

2. See Robert P. Parker, "Improved Adjustments for Misreporting of Tax Return Information Used to Estimate the National Income and Product Accounts, 1977," Survey of Current Business 64, June 1984, pp. 17-25.

For a brief, less technical summary, see Courtenay Slater, "Underground Incomes," American Demographics 7, November 1985, pp. 4-7.

3. The new computer price index will be described in a forthcoming article in the Survey of Current Business.

4. Allan H. Young and Helen Stone Tice, "An Introduction to National Economic Accounting," Survey of Current Business 65, March 1985, pp. 59-76; and U.S. Department of Commerce, Bureau of Economic Analysis, "Corporate Profits: Profits before Tax, Profits Tax Liability, and Dividends," Methodology Papers: U.S. National Income and Product Accounts, May 1985.

5. For background see U.S. Department of Commerce, Office of Federal Statistical Policy and Standards, Gross National Product Data Improvement Project Report, October 1977.

6. See Joint Economic Committee, Maintaining the Quality of Economic Data, op. cit.

7. See Congressional Research Service, The Federal Statistical System, 1980-85, op. cit.

Section II

1. U.S. Department of Commerce, Bureau of the Census, "Advance Report on U.S. Merchandise Trade: December 1985 Statistical Month" FT900 ADV (85-12), January 30, 1986.

2. Ibid,

3. Ibid.

4. U.S. Department of Commerce, Bureau of the Census, "Reconciliation of 1984 U.S.-Canadian Merchandise Trade Statistics," CB-85-107, June 12, 1985.

5. Ibid.

Section III

1. For a discussion of this problem, see proceedings of a conference on service industry statistics held in November 1984 by the Committee on National Statistics of National Academy of Sciences - National Research Council, forthcoming 1986.

2. Office of Management and Budget, Executive Office of the President, *Standard Industrial Classification Manual 1972*.

3. The proposed revisions were published for public comment in the *Federal Register*, Part 5, January 30, 1981, pp. 10116-10134.

4. The currently proposed revisions were published for public comment in the *Federal Register*, Part 2, February 14, 1986, pp. 5639-5664.

5. For a discussion of problems associated with coding see Thomas B. Jabine, *The Comparability and Accuracy of Industry Codes in Different Data Systems*, National Academy Press, 1984.

Section IV

1. The most recent Survey of Consumer Finance, conducted in 1983, was jointly sponsored by the Federal Reserve and several Executive Branch agencies. Results are presented in two articles in the *Federal Reserve Bulletin*, September 1984 and December 1984.

2. For a general description of SIPP, see Dawn Nelson, David B. McMillen, and Daniel Kasprzyk, "An Overview of the Survey of Income and Program participation: Update 1,"*Survey of Income and Program Participation*, *Working Paper Series* No. 8401, U.S. Department of Commerce, Bureau of the Census, December 1985.

3. Imputed rent equals the net income BEA estimates home owners would earn if they rented their houses to someone else. It is as if they actually paid rent to themselves, then subtracted the various expenses of buying and maintaining the house. Imputed interest represents the value of services provided by banks and other financial institutions for which no explicit charges are made. Banks finance these services out of the difference between the interest they pay their depositors and the interest they earn on loans and investments.

4. See U.S. Department of Commerce, Bureau of the Census, *Alternative Methods for Valuing Selected In-Kind Transfer Benefits and Measuring Their Effect on Poverty*, Technical Paper 50, March 1982; *Estimates of Poverty Including the Value of Noncash Benefits, 1979 to 1982*, Technical Paper 51, February 1984, and *Estimates of Poverty Including the Value of Noncash Benefits: 1984*, Technical Paper 55, August 1985.

5. Conference on the Measurement of Noncash Benefits, December 12-14, 1985, proceedings forthcoming 1986.

6. For background see U.S. Department of Health, Education, and Welfare, *The Measure of Poverty, A Report to Congress as mandated by the Education Amendments of 1974*, April 1976.

7. In 1980, the definition was modified to eliminate separate poverty thresholds for farm and nonfarm families and male and female householders. See U.S. Department of Commerce, Bureau of the Census, "Changes in the Definition of Poverty," *Current Population Reports*, Series P-60, No. 133.

8. See Courtenay Slater, "Concepts of Poverty," *The Journal of the Institute for Socioeconomic Studies*, Vol. IX, Autumn 1984, pp. 1-12.

9. Seventy-seven million households (88 percent of all households) received at least one kind of noncash benefit in 1984; 14.5 million households received food or housing assistance and/or were covered by Medicaid; 21 million households were covered by Medicare; 50 million households were covered by employer- or union-provided health insurance and 38 million by private pension plans. See U.S. Department of Commerce, Bureau of the Census, *Characteristics of Households and Persons Receiving Selected Noncash Benefits: 1984*, Current Population Reports, Series P-60, No. 150, November 1985. For estimates of taxes paid by the poor, see U.S. Congress Joint Committee on Taxation, *Federal Tax Treatment of Families Below the U.S. Poverty Line*, Staff Study, April 9, 1984.

10. See Department of Commerce, Bureau of the Census, Technical Paper 55, *op. cit.*

11. Slater "Concepts of Poverty" *op. cit.*

12. *Ibid.*

13. *Ibid.*

14. Greg J. Duncan, *Years of Poverty, Years of Plenty*, Institute for Social Research, University of Michigan, Ann Arbor, 1984, p.34.

Section V

1. Bureau of Labor Statistics, "Budget Estimates for Fiscal Year 1987," as presented to the Congress, February 1986.

2. See in particular Congressional Research Service, *The Federal Statistical System 1980-85, op. cit.* and ________, *An Update, op. cit.*. See also Office of Management and Budget, *Principal Federal Statistical Programs, ops, cit.*

3. Office of Management and Budget, Principal Federal Statistical Programs FY1985 op. cit.

4. Bureau of Labor Statistics, op. cit.

5. Ibid.

6. Ibid.

7. This and the following information about FY1987 budget requests is taken from the February 1986 congressional budget submissions for the Census Bureau, the Bureau of Labor Statistics and the Department of Commerce's Economic and Statistical Analysis appropriation account, which includes the Bureau of Economic Analysis.

8. Chapter 1, Section 9 of the Census Statute, 13 USC 9 prohibits the Census Bureau from disclosing individually identifiable information. In addition, for any records obtained by the Census Bureau from the Internal Revenue Service, the Internal Revenue Code, 26 USC 6103 prohibits any further disclosure.

9. For background, see U.S. General Accounting Office, After Six Years, Legal Obstacles Continue to Restrict Government Use of the Standard Statistical Establishment List, Comptroller General Report, GGD-79-17, May 25, 1979.

Senator **Sarbanes**. Thank you, Ms. Slater, for a very good opening statement and even more so for the very fine study you prepared for the committee, which goes, of course, into much greater detail and much greater exposition of this problem.

The first question I want to ask relates to a chart we are going to put up on accuracy of quarterly GNP data, because I think it is important to try to lay the basis here for an understanding that faulty statistics, or difficulty in providing timely and accurate statistics, may in fact have important policy consequences.

In your report you talk about the difficulty with documenting imports and the lags that exist, and then you say, and I quote, "The lags also have had a serious effect on the accuracy of the quarterly GNP data. In the recent comprehensive GNP revisions, the annual rate of growth of real GNP in the fourth quarter of 1984 was revised down from an initially reported 4.3 percent to only six-tenths of 1 percent. In contrast, the corresponding figures for the first quarter of 1985 were revised up from just three-tenths of 1 percent as initially reported to a revised 3.7 percent. About two-thirds of the fourth quarter revision and over one-third of the first quarter revision stemmed from corrections to the timing of exports and imports."

The article that appeared in the Wall Street Journal in January by Paul Blustein entitled "Critics Say U.S. Economic Picture Is Blurred by Reliance on Bad Data," says, and I quote:

> After setting out these figures for these revisions, in other words, last month the Commerce Department released revised GNP showing that growth in the fourth quarter of 1984, which at the time appeared to be moving along briskly at a 4.3-percent inflation adjusted annual rate, was actually crawling at an anemic six-tenths of 1 percent rate, and GNP growth in the first quarter of 1985 turned out to be 3.7 percent instead of the previously reported three-tenths of 1 percent.
>
> "This false signal of economic strength in 1984's fourth quarter played a role in the spurt of the dollar to astronomical levels that took place in early 1985," says Robert Barbera, an economist with E.F. Hutton & Co. "The faulty data," he contends, "even fooled the Fed into limiting monetary expansion last year."
>
> "Before you sit down and make a decision, you want to have the clearest possible assessment of where you are, whether you are an economist, entrepreneur, or river boat gambler," Mr. Barbera says. "We didn't have that here. The Fed officials said they knew the figures were unreliable and based their policy on other factors."

That really leads me to a broad question: "Do you think there is such broad skepticism about some of these figures that are not being used by decisionmakers? Have we reached the point where there is such a question mark over a lot of figures that their utility—and these are important figures we are talking about—for decisionmaking has been severely compromised?

Ms. **Slater**. I am somewhat at a loss on how to answer that. In a way I would say skepticism is a healthy thing. Our quarterly estimates of GNP are never going to be completely accurate. It is quite unfortunate that they were off as badly as they were in those two quarters that you cited, and when you realize that that traces back to the Customs Service not having enough people sitting there with their pencil and paper and tabulating the documents when they came in instead of 2 months later, you appreciate how important these details of administration and gathering and getting that done in the right way can be.

But even without the kind of problem which happened in those two quarters, you are always going to have some revision, and the people who use this data ought to realize that. They ought to sit down and look not just at the number, but they ought to look at what is happening in different sectors of the economy and what the underlying shape of the GNP is.

The Federal Reserve does that. The Federal Reserve looks at the numbers very carefully and if they see a component that looks out of line, I presume they talk to the people at the Bureau of Economic Analysis and they find out what the problem might be, and they use the data intelligently. Not everyone uses the data is so careful.

So my first comment would be there is some responsibility on the part of the user to look carefully at what they have and use it intelligently, and if that is done I think people ought to have confidence in the GNP and ought to rely on it, and I think most people do.

My concern is about those who look only at one summary number and rely on that and scream and yell if they later find out it is a little bit off.

In that connection, if I may, Senator, one thing that happened recently in our statistical system is that the Bureau of Economic Analysis has ceased issuing a statistic that used to come out before the end of each quarter called the GNP Flash.

Senator SARBANES. That is the next question I was going to ask you.

Ms. SLATER. Shall I let you ask your question before I answer?

Senator SARBANES. No, no. Go ahead.

Ms. SLATER. I regret that they decided to stop issuing the GNP Flash because I thought it was a very useful set of information. It is true that the number sometimes is revised substantially. What you are getting before the end of the quarter is not really an estimate but a forecast because the quarter isn't over yet.

But the Bureau of Economic Analysis can make the best forecast of the current quarter that can be made because they are closer to the data that is coming in than anybody else. What we are going to have now is a bunch of other people running around making forecasts that won't be as good.

So I think that is a real loss. They are not only are going to stop issuing it for the public, they are going to stop computing it for use inside the Government and that, too, is a loss, and I am afraid it will mean a wakening of interest in the associated economic analysis that BEA does so well.

We ought to be moving in the direction of making more of that analysis available to the public, not of discouraging it. So I regret that decision to stop issuing the Flash, and I wish it could be reconsidered.

Senator SARBANES. It is very helpful to have your view on that. That is the next question I wanted to come up with.

I would like to include at this point in the record a letter by Stephen McNees, a vice president and economist of the Federal Reserve Bank of Boston, that appeared in the Wall Street Journal headed "GNP 'Flash' Gives a Good Picture," it discusses the plan of the Department of Commerce to discontinue its Flash estimate of GNP and points out the usefulness of this figure, and the fact that, in any event, because we will now get a plethora of divergent individual estimates, as he points out, in the 4 weeks prior to the first official statement.

And I quote him: "Although this might be a boon to economists and forecasters, it will be an extremely inefficient way to generate a reliable estimate of GNP."

I will include this entire letter in the record at this point.

[The letter follows:]

(From the Wall Street Journal, Feb. 27, 1986)

GNP 'Flash' Gives a Good Picture

You reported Jan. 28 the plan of the Department of Commerce to discontinue its "flash" estimate of GNP, which has been prepared a few weeks before the end of each quarter. The primary reason for this decision is that the "flash" estimate is "unreliable"—subject to large subsequent revisions. A secondary reason is that it will either save the department money or free resources for more useful pursuits. Neither of these claims is warranted.

Is the "flash" estimate of nominal and real GNP less reliable than the preliminary estimate made shortly after the quarter's end? Three studies of this question have been made, each using a slightly different procedure and examining a different period of time. All three studies reached the conclusion that the "flash" estimates of nominal and real GNP have been at least as reliable as the subsequent preliminary estimate. The "flash" is probably more useful for economic decisions because it is available earlier. If it were desirable to eliminate one of the department's GNP estimates, it would seem that the estimate made in the third month after a quarter has ended—the 75-day estimate—would be a better candidate. The 75-day estimate has not been significantly more accurate than the one a month earlier.

The facts necessary to produce the most reliable estimate of GNP are not available for years after a quarter has ended. If the timeliness of an estimate were not an integral part of its usefulness, we would abstain from estimating GNP for several months or even years after the fact. In practice, early estimates of GNP are so important for public and private economic decisions that estimates will inevitably be made. The only question is who will make those estimates.

The Department of Commerce can make more reliable estimates at a lower cost than can the dozens of public and private institutions whose primary concern is the economic implications of estimated GNP. Discontinuing the "flash" estimate will free some of the department's resources or save it some money. The consequence of eliminating the "flash," however, will be that a larger amount of resources in other government agencies and a vast amount of resources in the private sector will be devoted to preparing a cacophonous plethora of divergent individual estimates in the four weeks prior to the first official statement. Although this might be a boon to economists and forecasters, it will be an extremely inefficient way to generate a reliable estimate of GNP. The department has a unique capacity to provide the most reliable estimate at the lowest cost. Given the necessity of preparing its preliminary estimate, the cost of preparing the "flash" estimate is trivial. Moreover, the reliability of the department's preliminary estimate may well decline as a result of its failure to prepare an earlier estimate. Given the complexity and importance of estimating GNP, economic decision makers can benefit from a trial-run estimate before "all the facts are in."

STEPHEN K. MCNEES
VP and Economist
Federal Reserve Bank of Boston

Boston

Senator **Sarbanes**. In your testimony, Ms. Slater, you refer to weakened coordination among statistical agencies. In what way has it been weakened and what do you think can be done to strengthen it?

Ms. **Slater**. Because our system is divided among a number of agencies it is very dependent on coordination to run smoothly to avoid duplication, to prevent gaps in the system and to have a budget which makes sense when you add all the agencies together, to avoid this kind of thing where one agency is cutting back on business lists and another agency is asking for more.

Traditionally, our system has been coordinated since the 1930's by a Statistical Policy Office located most of the time in OMB and one that I think functioned quite well over many years.

In the 1970's that functioning began to be less smooth. That office was transferred to the Commerce Department in 1977 out of OMB. That was not as good a location for it. It is OMB that has the authority to tell other departments what to do and not the Commerce Department. I had oversight responsibility for it when I was at Commerce, and it was an experience I enjoyed and felt I was doing something important and interesting, but neither then nor now do I think that was the right place for it.

It was transferred back to OMB in 1981 or 1982 under the provisions of the new Paperwork Reduction Act, but it was placed in a position in OMB where it is very far down the hierarchy. It doesn't have much authority. It has a very small staff, only a handful, three or four professionals on that staff I believe, and it just can't do all the things need to be done, neither in terms of staff resources nor authority to influence decisions. It is just not adequate.

As to what you can do, one approach would be to strengthen and enlarge that office. That would require an amendment to the Paperwork Reduction Act which is very specific about where within OMB that office is to be located, and in my opinion it is located in the wrong place.

The other alternative, and increasingly I think this may be the way to go, would be to work toward a unified single statistical agency. That is not something that could be accomplished easily or accomplished overnight and would probably have to be done in stages. But I think with the coordination having become as weak as it has, it is time to start thinking along those lines and seeing if a sensible approach can be devised.

Senator **Sarbanes**. Is that the approach that characterizes most other advanced industrial countries, a unified statistical agency?

Ms. **Slater**. I believe so. It does in many of them I know. The British and the Canadians have unified agencies. That doesn't mean they have no problems, but it is I think more typical of other countries than our approach, and it gets around some of our problems at least.

Senator **Sarbanes**. And would you set that up as a separate independent agency with a grant of congressional authority, or how?

Ms. **Slater**. That would be one way to do it, and I am speaking off the top of my head here. I am not coming before you with a plan. I think you probably would have to do it that way somehow and make it an independent agency, possibly along the model of a regulatory agency. This is something that would have to be looked at quite seriously and the different administrative aspects considered and analyzed.

This is a perennial question and there have been a number of papers written on this pro and con. So there is a literature and a background.

Senator **Sarbanes**. But in the near term, I take it, the thing that could be done would be to shift the location of the Statistical Policy Office within the OMB to give it more importance and to strengthen its resources?

Ms. **Slater**. Yes, sir, I think so.

Senator **Sarbanes**. Senator Proxmire.

Senator **Proxmire**. Thank you, Senator.

Ms. Slater, in your study you have a very helpful table on imports by statistical month, and you compare the original with the revised, and the revisions in some months extremely sharp. They go all the way up to 13 percent. In September, for instance, 1985, the original estimate of imports was at $32,860 million and the revised estimate was $28,581 million.

However, there is some kind of balance because there is, as I call it, 6 months of overstatement and 5 months of understatement. On the other hand, the first 3 months in a row there was consistent overstatement of imports.

Let me ask you, these seem to me to be gross errors in the ability to estimate the imports. What adverse effects would this have on policies followed (a) in the public sector and (b) in the private sector? What kind of mistakes would we make on the basis of this faulty information?

Ms. **Slater**. Well, one was pointed out here on this chart. The original estimates of the GNP in the fourth quarter of 1984 and the first quarter of 1985 were very badly off, enough so to influence what you would conclude by what was happening to the economy. A very large part of the revisions that later came along were due to getting the imports into the correct month finally. So one serious problem is the impact it can have on the GN

Senator **Proxmire**. Now what would be the effect of the adverse? Supposing we do have faulty intelligence on the growth of the GNP, what practical policies do you think would be adversely affected by that?

Ms. **Slater**. Well, in the fourth quarter of 1984 it looked like the economy was slowing down badly and it later turned out that it was growing. Excuse me, I said it backward. It looked like it was growing right along and it later turned out it was slowing down badly. That is said to have had effects on trading in the dollar, the value of the dollar, which again traces back to what happens to our trade balance.

It would have had general effects on the kind of policies that would be formulated, macroeconomic policies for 1985. You feel differently about the economy if you hear that GNP has gone up less than 1 percent than if you hear it has gone up 4 percent in the particular quarter, and you start worrying are we getting into a recession and do we need to stimulate more. So that is a serious matter.

Another kind of effect is that because you don't know whether these data are accurate on a monthly basis you are going to have trouble spotting changes in trends. We are all watching now for the lower value of the dollar to have a favorable effect on our trade balance, and yet we see reported in the paper a record trade deficit last month and the month before. And we don't know. Did these imports really come in in those months or did they really come in before and we just got around to tabulating them.

So it is going to increase the difficulty of spotting the point in time at which our trade balance really starts to improve. Over the course of a year these mistakes average out, and if all you look at is annual data, they don't make so much difference. But because there is so much fluctuation from month to month, anything you want on a timely basis is difficult to figure out.

Senator PROXMIRE. Are you confident that the revised figures are accurate?

Ms. SLATER. I am confident that they are more accurate than the unrevised figures. [Laughter.]

Senator PROXMIRE. Well then maybe they can still be grossly inaccurate.

Ms. SLATER. They are still somewhat inaccurate. You can get figures from the Census Bureau. In fact, they are here in the other column of this table, as a matter of fact, as to even on the revised basis how much of the imports reported in that month actually came in in an earlier month. And you get it down, for example, in November from 40 percent to 5 percent. Well, that is a major improvement. It is not perfection, but I think I could live with that 5 percent. So I feel a lot more comfortable with the revised figures.

The problem with the revised figures, aside from the fact that it takes another month to get them, is that they are only available for the totals. You don't have the detail by commodity, by port of entry and by country of origin. The tabulation problems are much worse at some ports than others. So for anybody that is trying to look at imports coming in on the west coast from Japan, for example, of a particular commodity would have, I presume, a much more serious problem with the timing of this data than somebody who is just looking at the total.

Obviously that is important. People both in the public and private sector want to know about trade in commodities, trade with a particular country and trade coming into a particular part of our country.

Senator PROXMIRE. How costly would it be to get that kind of data, the trade by commodities so we could have it in a reasonably expeditious way?

Ms. SLATER. The answer is I don't know. The way to go I think is to speed up the tabulation until a computerized system can be introduced, to put more people on at Customs and to have more people from the Census Bureau out there working with Customs to help devise ways to speed tabulation.

That is happening now to some extent, and that is why you see improvement in October and November as compared to earlier last year, but there is a lot more of that that needs to be done, and given today's budget climate there is a big question mark over how well it will be done.

Senator PROXMIRE. The description that you gave us of the way the Customs operates with pen and pencil instead of with computers suggests that if not a one-time cost, that the initial investment in adequate technology would be relatively modest in the longrun and would give us far more timely and more accurate statistics; is that right?

Ms. SLATER. Yes. They are now making that investment. They have been developing a computerized system and it is supposed to begin testing within the next month or two.

Senator PROXMIRE. How long will it be before it is deployed?

Ms. SLATER. I don't know. I believe it is something like a plan to phase it in over 2 years. I am not sure of the exact time, but as with many new things, they don't always go as smoothly and as quickly as you hope. So I think we just have to wait and see. I do think it is important to monitor that and to be sure that Customs remains sensitive to the importance of this. The Customs Service has other things to deal with, after all, like smuggling and terrorism and other problems. Tabulating statistics is not necessarily the thing in the forefront of their minds, when they have other serious business to conduct.

So it is a sort of a continuous problem of reminding and impressing on the Customs Service that this is very important and that we want the level of concern to remain high.

Senator PROXMIRE. You gave us an insight into poverty that I didn't realize that it was that simplistic. They have made the assumption that people probably spend a third of their income on food and then use that as the fundamental basis for figuring what the poverty level is.

How could you define poverty and how could we improve this to give us a better insight? I had made the assumption erroneously that poverty was determined on the basis of the cost of the necessities of life, including food and including housing, which is usually more, or as I understand it is more costly than food even for people with very low incomes and then other products that people have to buy if they are going to live at all.

How much would it cost to have a definition that was much more comprehensive than simply confirming themselves to a fraction of food which, as you say, has been outdated for years?

Ms. SLATER. Oh, I don't think it would cost much to have a new definition. The question is who is going to get together and decide what this new definition should be. It is not something just to leave to the Census Bureau, and they don't think so either.

The number of entities in this town which are ducking the definition of poverty and asking somebody else to take it on is considerable. Considering how simple the present definition is, I think it has served pretty well over the last 20 or 25 years, but I do think it is rapidly reaching the point where it needs a basic new look.

I think one thing that needs to be looked at in developing a new definition is how people at different income levels actually do spend their money. We have the data to do this. We have the consumer expenditure survey that the Census Bureau conducts anyway. It is used to develop the Consumer Price Index, and that and other data could be used as the basis for examining how people at average incomes and people at 10 percent below the average and 30 percent below the average and so on actually spend their money, what proportion do they spend on food and what proportion do they spend on housing and what do they get for their money.

You are still left with making a judgment of where do you reach the point where it looks like, even where they spend their money wisely, they can't maintain what today in our society would be thought of as a minimum adequate standard of living. Then you say, all right, that is the new poverty line. But that is a social judgment and a political judgment and not one to be left to the statistical agencies.

Senator PROXMIRE. That is one to be made by the elected officials, I presume, by the administration and by the Congress, right?

Ms. SLATER. Yes, and somehow the administration and the Congress need to put a group together that can work on this question.

Senator PROXMIRE. Is there any initiative in this direction, any effort that you know of by either the Congress or the administration or in the private sector in posing it to the Congress to make this kind of a study?

Ms. SLATER. None that I am aware of, Senator. The only aspect of the poverty definition which is receiving a lot of discussion is the question of whether to include noncash benefits in income. Noncash benefits are obviously vastly more important than they were 20 or 25 years ago, but that is just part of it.

Senator PROXMIRE. In the first place, we ought to have a definition of poverty which it seems to me is a reasonable definition that is carefully developed and widely accepted. And as you say, this is something that we just fell into 25 years ago and we have been pursuing that policy without any notion of whether this is a reasonable way to assess poverty or not.

Ms. SLATER. Exactly.

Senator PROXMIRE. The one merit I suppose it has is that it is consistent in a sense that it makes it easier to compare. Obviously if we change the definition of poverty, then it would be harder for us to, unless we go back, and I guess we can do that, but it would be hard to compare whether we are making progress or not and if more families are in poverty or fewer families and so forth.

Ms. SLATER. That is right.

Senator PROXMIRE. This has such profound effect, or it seems to me it should have on the policies that Congress pursues that it is something that we ought to know in meticulous detail about.

Ms. SLATER. Yes. The fixed standard does have the utility of being able to make comparisons over time so that we can say, well, we know today how many people are in what we considered poverty 25 years ago. We know it if we don't take account of food stamps and a lot of other things. So we don't know it fully, but during those 20 to 25 years our society as a whole has grown a great deal richer. The average income is much higher and our notion of what we think everybody ought to have has changed.

Another way of saying that is that the people that are in poverty today are much poorer relative to the average, and the gap between the average and the poor is much larger today than it was in 1960. I don't think that is very widely recognized.

So although this fixed standard is useful for comparisons, every now and then you reach the point where you need to say maybe we need a new one.

Senator Sarbanes. I understand from your study that in 1960 or about the time we developed a concept of a poverty standard for four, that was just about half of the median income at that time. So if you took the median income of the country, in other words, the 50-percent level for the American people, the poverty standard was defined at about half of that, 49 percent.

Now that poverty standard as compared to the median income is 33 percent of the median income.

Ms. Slater. Approximately.

Senator Sarbanes. So in effect the median income has moved up and the poverty standard in effect has dropped in relation to the median income. So while we have this fixed standard, it may in fact not accurately reflect the proper definition of poverty under current circumstances, particularly if you define poverty in a relative sense, that is, compared to how the rest of the society is living. Would that be correct?

Ms. Slater. That is correct, and that is part of the reason why as you hear so often cited, so many of the people in poverty today are families headed by women and families without somebody working because those working poor who are at say 50 percent of average incomes, the line has stayed there and they have moved up above it along with the whole society. The people who were way down here way below the line are still below the line; they may have come up but they haven't come up far enough to cross the line.

So part of the reason that the nature of the poverty population has changed in terms of the family structures is this changing relationship with average incomes.

Senator Sarbanes. Well, of course, I think that has been reflected in some congressional programs which have provided benefits, to address a poverty question, at an income level higher than say 33 percent of the medium income, because if you look at that income it is clearly inadequate to meet housing needs or food needs and so forth. So the Congress definition often has been in relationship to the median income and at figures higher than 33 percent of the median income. Isn't that correct?

Ms. Slater. Yes, sir; and that seems to me evidence that Congress recognized that people at little bit above the poverty line needed some assistance. There are a number of laws with provisions like that in them.

Senator Sarbanes. Ms. Slater, I wanted to pursue one other line of questioning before we move on to the next panel.

There is a tendency, although not in your study, to focus in these public sessions on existing statistics and existing data and to discuss the shortfall in them. The chart we put up is a perfect example of that focus.

But I would like you to develop a bit of the problem we face in failing to develop new concepts to address changing economic circumstances. Perhaps the computer classification is a good example of that. I gather we were using assumptions on computers that $10,000 spent on a computer in 1984 bought the same computer power that $10,000 spent on a computer in 1972 bought, and that assumption had an impact on the figures about investment undertaken by businesses since a lot of it was in computers but was being understated.

I wonder if you could develop that point as to computers and others that you think are important, and that is the need to focus not only on the existing statistics, but to engage in the effort to update, alter, modify, and bring in new concepts.

Ms. **Slater**. Well, there is a whole array, I guess, of things that need to be done. Many of them lie in the area of measuring the service sectors of the economy, which are not nearly as well measured as manufacturing. I think that is recognized now, and Congress has appropriated funds beyond what the administration has been requesting for the Commerce Department and the Labor Department to do work on improving the service sector data.

Like everything else, that effort is going to be to some extent a budget casualty in the next year or two if things go along as they are. There are many needs there. One is to update the standard industrial classification codes which are very weak for services. You have many service industries which you can't analyze adequately because you don't have a classification to put the data in, and you can't organize your data to make any sense out of it.

Our data on international trade in services ranges from weak to nonexistent. We have been talking about here the import and export statistics which we have been so readily criticizing. Those statistics are for merchandise trade, that is, trade in goods, and despite their weaknesses they are far better and far more detailed than the data on trade in services.

The Bureau of Economic Analysis has been trying to do some work in that area and develop some new surveys in that area. They have run into some problems with survey designs and problems getting their form approved. So that effort is taking longer than contemplated, but there is work underway.

We need price measures and productivity measures in the service sector, and the Bureau of Labor Statistics has been working on those. Again, with the budget problems that BLS has right now, that work is going to take a back burner for the time being and go along much more slowly than one would like.

So I think focus on the service sector would be very helpful.

Senator **Sarbanes**. In the SIC Codes a big study had been done and we were about to update them in 1981 and 1982. Then there was a budget cut which precluded that; is that correct?

Ms. **Slater**. That is correct.

Senator **Sarbanes**. How much effort has to go back into preparing a second effort. What does it mean to get to a certain point and then lose it, so that you have to engage in another entire process of preparing it again?

Ms. **Slater**. That is right and that has been done, and that whole process of all the agencies getting together and developing a revised code and talking to the businesses that are interested, and there is a lot of business interest in this and every industry, of course, wants its own SIC Code.

So that whole thing has been done over again. It is a year or so of work that has just gone into it, probably 2 years, and the proposed new revisions have just been published in the Federal Register for comment. They are publicly available as of a couple of weeks ago.

The problem now is that now you get to the expensive part, which is implementing—well, of course, you have the process of public comment and you agree on some sort of new code—and then you have the problem of implementing it which is expensive.

The Census Bureau plans to implement the new code in conjunction with taking the 1987 economic census as they will get new information from every business in the country anyway, and they will code it to the new definition as part of that work.

The danger is that other agencies, particularly the Bureau of Labor Statistics, will not have the funds to implement that to take all the businesses about which they have data and put them in the right code. If BLS does not implement the new codes, BLS data won't match Census Bureau data, which would be a nightmare of analysis.

The Bureau of Labor Statistics has not requested any funds in the 1987 budget for implementing this SIC Code. A lot of money could be saved and a better job could be done if BLS and Census could get together on this. Again, that is a problem of confidentiality law which restricts or prevents their cooperation on this.

So, if we are really going to get a new SIC Code in use and in place, as opposed to on paper in the Federal Register, in any kind of timely fashion in the present budget environment, I think it is very important to get that law amended so that there can be a joint effort to implement it.

Senator SARBANES. How much money would we need to do it? Suppose someone said we really think that is important to put a new SIC Code into place, clearly the one we have is inadequate and that has been recognized now for any number of years and we want to get this done. How much money would it take?

Ms. SLATER. I think the Bureau of Labor Statistics, if they do it the way they presently contemplate doing it, which is going out and taking their own survey of the businesses they collect data from to find out and get an update on what their business is and put them in the right category, they need probably a couple of million dollars to do that. I don't really know, but it is big money in terms of the BLS budget when you talk a million dollars.

They could save part of that money, not all of it, but a large part, if they could rely on the Census Bureau to give them the information on the new codes, if that law could be amended to permit that.

Senator SARBANES. Senator Proxmire.

Senator PROXMIRE. I just have one more question I would like to ask, if I might.

Ms. Slater, could you list the major Federal Government domestic programs which are dependent on statistical data for the distribution of their funds?

Ms. SLATER. I don't think I could list all of them off the top of my head, Senator.

Senator PROXMIRE. Give some of the principal ones.

Ms. SLATER. You have, of course, the income tax which is indexed to the CPI now, Social Security, Federal Government retirement, many though not all of the welfare type programs, the means tested poverty programs.

According to the Bureau of Labor Statistics, and this is a figure they have in their budget, a 1-percent change in the CPI has a $4.6 billion impact on the Federal budget when you add the tax and spending impacts together. So it is a massive impact.

Senator **Proxmire**. A 1-percent change in the CPI has a $4-plus billion impact on the Federal budget.

Ms. **Slater**. About 4½, yes, sir.

Senator **Proxmire**. So if it is off by 1 percent, then the expenditure is off one way or the other by $4 billion.

Can you tell me what amount of Federal funding is involved in these statistically based domestic programs? It sounds like it is most of the budget—not most of the budget, perhaps, because it doesn't include, or wouldn't include as much in the military area, but would include what? What would you say, a third or a half of the Federal budget?

Ms. **Slater**. Oh, at least a third. It includes all Social Security and all retirement. In addition to the things that are indexed to the CPI, you use population and per capita income statistics for distribution of revenue sharing and other grants in aid, many of them. So you are talking about a large hunk of the grants to State and local governments.

Senator **Proxmire**. So if the statistics are inaccurate, then we are likely to make a multibillion-dollar mistake?

Ms. **Slater**. Yes, sir. No question about that.

Senator **Sarbanes**. Well, Ms. Slater, thank you very much both for your testimony and for this very comprehensive and thoughtful study that you have done for the committee and we hope to follow up on it. We appreciate your testimony today.

Ms. **Slater**. Thank you.

Senator **Sarbanes**. If Ms. Wallman and Mr. Duncan would come forward and take their places at the table.

Ms. Wallman is the executive director of the Council of Professional Associations on Federal Statistics. She was formerly Deputy Director of the Office of Federal Statistical Policy and Standards at OMB and subsequently Senior Advisor for Statistical Affairs to the Under Secretary of Commerce.

Mr. Duncan is a corporate economist and chief statistician for Dun & Bradstreet and the chairman of the Committee on Statistics of the National Association of Business Economists. Mr. Duncan was formerly the Director of the Office of Federal Statistical Policy and Standards at the Office of OMB and he has served as U.S. representative and chairman of the United Nations Statistical Commission.

We are pleased to have you both here. I don't know if you have worked out an order between yourselves, but if not, I think I would probably have Ms. Wallman go first.

STATEMENT OF KATHERINE K. WALLMAN, EXECUTIVE DIRECTOR, COUNCIL OF PROFESSIONAL ASSOCIATIONS ON FEDERAL STATISTICS

Ms. **Wallman**. That is fine. Thank you.

Senator Sarbanes, we are most grateful for the interest that you and Senator Proxmire and many of your colleagues on the Joint

Economic Committee have demonstrated and continues to demonstrate with respect to the health of our Nation's statistical system.

In my testimony today, which I will abbreviate somewhat from the prepared statement, I will provide an overview of how Federal statistical programs have fared during the past few years, outline a few of the effects of the proposed fiscal years 1986 and 1987 spending levels on the various statistical programs, and then conclude by highlighting several overarching problems that continue to affect the quality and usefulness of Federal statistics.

As we discussed earlier this morning to some extent, the responsibility for collecting, analyzing, and disseminating Federal statistics is spread throughout the departments and independent agencies of the Federal Government.

In 1985 more than 70 agencies reported to the Office of Management and Budget that they would each spend at least a half a million dollars on statistical activities. In total these programs accounted for approximately $1.5 billion in Federal spending, roughly one-seventh of 1 percent of the total Federal budget.

Mirroring trends in funding for most civilian activities, the budgets for statistical programs have been constrained in recent years. Specific budget cuts, coupled with tight personnel ceilings, uncertainties about the levels of funds that ultimately would be available each year, and restrictions on how resources may be spent, have posed difficulties for the statistical agencies in maintaining and improving their programs and products.

In some cases, these budgetary constraints have resulted in elimination of programs that were obsolete or unnecessary, and in a few cases the budget stringencies have resulted in the introduction of efficiencies to ongoing programs.

Indeed, to a very limited extent new initiatives or major revisions of existing programs such as the Consumer Price Index have been undertaken.

By and large, however, tight funding levels have required the agencies to alter the scope of their ongoing activities by collecting information less frequently, by reducing sample sizes or the content or the geographic coverage of various programs, by extending the time between the collection of data and their publication, and by eliminating or reducing the frequency, scope, and distribution of publications and other products.

Moreover, the statistical agencies have found it increasingly difficult to introduce methodological and technological changes needed to keep ongoing programs current, to perform the research necessary to improve the Nation's statistical sources, and to attract and retain high caliber staff.

While the administration's budget as originally proposed for fiscal year 1986 generally would have provided level funding for the major statistical programs, the subsequent 4.3 percent reduction in spending authority will require agencies to curtail ongoing activities or to delay further the modest improvements that had been scheduled.

For fiscal year 1987, the budget levels recommended by the administration essentially will continue recent funding trends for the principal statistical agencies. Limited increases that would restore funding to levels originally proposed for fiscal 1986 in most cases will cover only the mandatory rises in costs of conducting ongoing activities, routine program maintenance, and the implementation of periodic programs which are conducted on a less than annual basis.

In a recent analysis that we have completed comparing the budget levels for fiscal year 1987 to fiscal year 1985 for the principal statistical agencies, we have concluded that in constant 1985 dollars only four of those agencies would receive increased resources for continuing programs under the proposed fiscal 1987 budget.

For the most part, such increases are earmarked for specific new programs, or for periodic data collection activities, and will not allow for the improvement of ongoing statistical activities.

The agencies whose budgets would decrease in constant dollars include those which are of central interest to the Joint Economic Committee, several of which have been discussed already this morning.

What is more important than examining the precise dollar levels for each of these agencies, are the effects that the proposed budget authorities would have on specific programs and products.

A number of those items have been discussed already, both in Courtenay Slater's study and in the discussion this morning, and I think rather than belaboring those, I would ask that this part of the testimony be included in the record with the particular examples, and I would like to move on to some more general findings.

Senator SARBANES. Your prepared statement will be included in the record.

Ms. WALLMAN. Thank you.

In the prepared statement I do provide a number of specific examples on how the programs will be affected in 1986 and 1987.

We find in general that statistical agencies once again will accommodate funding constraints by eliminating some programs, by reducing the content and geographic coverage of others, by delaying the collection of information and by postponing the introduction of improvements that already have been identified as necessary.

In addition, there will be further delays in modernizing data gathering procedures and in updating equipment. Personnel levels will be cut back and quality maintenance activities will be reduced. Many of the series that will be affected by these changes are the very ones that produce the data needed to assess what is happening to the economy and to the deficit.

Our council will continue to express concern about the fate of specific statistical programs, but we would also suggest the need to recognize several less immediately obvious and less measurable effects that are fostered by the current policy and budget environment.

For example, research to improve the quality of various statistical programs is needed, but agencies have found it increasingly difficult to fund such efforts as they have striven to continue fundamental data collection activities.

Changes in the economy and society call for modification of the concepts and definitions used in Federal statistical programs, but the introduction of changes to keep statistical programs current frequently has been precluded.

Technological advances would allow agencies to introduce new techniques that could improve the efficiency, timeliness and quality of Federal statistics, but such modernization has been delayed.

Flexibility in allocating reductions in spending authority has been restricted, stripping agencies of the ability to manage limited resources most effectively.

Decisions about which programs to retain or cut are made on an agency-by-agency basis without reference to the relative importance of various programs in meeting societal needs, the effects of individual decisions on the statistical system overall or the activities of other agencies.

Finally, we have noted that attrition rates for statistical agency personnel are beginning to increase rapidly, causing a decline in the quality of staff; and talented young people are less willing to enter or continue service in the Federal statistical system.

Over the past several years our council and many of its members have worked to identify and resolve key issues affecting critical statistical programs. In our view, recent funding proposals of the administration and budget decisions by the Congress have shown an increased recognition of the importance of these activities for the Nation.

Despite our sense that some improvements have been made, however, it is clear that statistical programs will be among those affected by measures that may be taken to reduce the Federal deficit.

In the coming year, users of Federal statistics will redouble their efforts to assist the administration and the Congress by identifying the most fundamental statistical programs, specifying changes that would preserve or improve the quality of essential data series and suggesting ways in which administrative record systems could be modified or enhanced to meet statistical needs.

At the same time we will endeavor to identify data series that could be produced less frequently, in less detail or that perhaps could be eliminated entirely. The willingness of the Congress and the statistical agencies to hear our concerns and priorities in the past gives us encouragement that our efforts will be worthwhile.

We remain concerned, however, that the importance of maintaining and improving critical statistical programs will be overshadowed by a philosophy which suggests that information collection activities are in the first instance a burden, something to be eliminated regardless of the usefulness of the data that are produced.

At the present time this is the kind of host environment in which OMB's small statistical policy staff must operate. During the past 18 months the Office of Management and Budget has developed and issued a circular on the management of the Federal information resources.

Describing the responsibility of the Federal Government for collecting information, Douglas Ginsburg who was until last summer the head of OMB's Office of Information and Regulatory Affairs stated, and I quote, "Each of these information collections requires the expenditure of public and private resources that might be more profitably spent on something else. The more money we spend to collect, process, and disseminate information, the less there is available for Government services."

Senator, we contend that the provision of high-quality information for use by public and private decisionmakers is in fact a vital Government service. We find ourselves more in agreement with former Commerce Under Secretary Sidney Jones who argued, and I quote:

> The policy environment for statistics should be significantly changed from one in which statistics are thought to be a burden upon respondents, a burden that is required to compete with other governmental spending programs for claims against the scarce resources of the Treasury. I think that should be changed to a policy environment in which statistics are considered to be the necessary foundation for making wise policy decisions, or at least informed policy decisions.

We look forward to working with your committee and others in the Congress toward the realization of Mr. Jones' perspective.

This concludes the oral presentation of my testimony.

I would like to thank you again for inviting us to appear today and would be happy to answer any questions.

[The prepared statement of Ms. Wallman follows:]

PREPARED STATEMENT OF KATHERINE K. WALLMAN

Mr. Chairman, I am Katherine Wallman, Executive Director of the Council of Professional Associations on Federal Statistics. The Council, established in 1980, is a coalition of organizations concerned with broadening and strengthening the participation of the professional community in decisions that affect the integrity, quality, utility, and accessibility of federal statistical programs and products. Together, the memberships of our constituent associations include more than 200,000 economists, statisticians, demographers, sociologists, psychologists, political scientists, actuaries, and other professionals concerned with the information produced by the federal statistical system. Senator Sarbanes, we are most grateful for the substantial interest you and your colleagues on the Joint Economic Committee continue to demonstrate with respect to the health of our nation's statistical resources. In my testimony today, I will provide an overview of how federal statistical programs have fared in recent years, outline some effects of revised FY 1986 and proposed FY 1987 spending levels on these programs, and highlight several overarching problems that continue to affect the quality and usefulness of federal statistics.

As you no doubt are aware, the responsibility for collecting, analyzing, and disseminating federal statistics is spread throughout the Departments and independent agencies of the Executive Branch. In 1985, more than 70 agencies reported to the Office of Management and Budget that they would spend at least $500,000 on statistical activities.[1] In total, these programs accounted for approximately $1.5 billion in federal spending -- roughly one-seventh of one percent of the total federal budget, or one quarter of one percent of the budget authority for domestic spending.

Mirroring trends in funding for most civilian activities, the budgets for statistical programs have been constrained in recent years. Specific budget cuts, coupled with tight personnel ceilings, uncertainties about the levels of resources that ultimately will be available each year, and restrictions on how resources may be spent, have posed difficulties for the statistical agencies in maintaining and improving the quality of their programs and products. In some cases, budgetary constraints have resulted in the elimination of programs that were obsolete, unnecessary, or of poor quality. In other cases, funding limitations have resulted in the introduction of efficiencies to ongoing data collection activities. And to a very limited extent, new initiatives or major revisions of existing programs have been undertaken.[2]

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[1] Not included in these estimates are statistical activities of agencies such as the Federal Reserve Board, whose budgets are not reviewed by OMB, and organizations such as the Central Intelligence Agency, whose budgets are not included in the Budget of the United States Government.

[2] For example, the Congress provided funding for the Survey of Income and Program Participation, designed to improve statistics on cash and noncash income and household wealth, and for some improvements to data on the services sector of the economy.

By and large, however, the tight funding levels for statistical programs[3] in recent years have required agencies to alter the scope of ongoing activities by collecting information less frequently; reducing sample sizes, the content, and/or the geographic coverage of particular surveys; extending the time between data collection and publication; and eliminating or reducing the frequency, scope, and distribution of publications and other products. Moreover, the statistical agencies have found it increasingly difficult to introduce methodological and technological changes needed to keep ongoing programs current, to perform the research necessary to improve the nation's statistical sources, and to attract and retain high calibre staff.

While the Administration's budget as originally proposed for FY 1986 generally would have provided level funding for most major federal statistical programs, the subsequent 4.3 percent reduction in spending authority to meet requirements of the Balanced Budget and Emergency Deficit Control Act left virtually all of these agencies with current dollar budget authorities below FY 1985 levels. As a result, the statistical agencies will find it necessary to curtail ongoing activities, or to delay further the modest improvements that had been planned.

For FY 1987, the budget levels recommended by the Administration essentially would continue recent funding trends for the principal statistical agencies. Limited increases that would restore funding to the levels originally proposed for FY 1986 in most cases will cover only mandatory rises in the cost of conducting ongoing activities, routine program maintenance, and the conduct of periodic programs scheduled for implementation on a less than annual basis.

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[3] For details of the funding history for principal statistical agencies in fiscal years 1985 through 1987, see the table provided at the end of this statement.

In a recent analysis[4] comparing FY 1987 budget levels to FY 1985 budget levels for ten federal agencies that have the production of statistics as their principal mission, the Council of Professional Associations on Federal Statistics found that in constant 1985 dollars only four of the agencies would receive increased resources for continuing programs under the proposed FY 1987 budget. For the most part, such increases are earmarked for specific new programs, or for periodic data collection activities,[5] and will not allow for the improvement of ongoing statistical series.

The agencies whose budgets would decrease in constant dollars include those which are of central interest to the Joint Economic Committee -- the Bureau of Labor Statistics, the Bureau of Economic Analysis, the IRS Statistics of Income Division, Agriculture's Statistical Reporting Service, and the Energy Information Administration. The budget for current programs of the Bureau of the Census would essentially remain level in constant dollars. What is more important than examining the precise dollar levels for these agencies, however, is assessing the effect that proposed budget authority would have on their programs and products.

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[4] This analysis will appear in AAAS Report XI: Research and Development, FY 1987, to be published by the American Association for the Advancement of Science in March 1986.

[5] Only the Bureau of the Census has a separate budget authority for the conduct of periodic programs. For other agencies, obtaining required increases in budget authority to fund the periodic (e.g., at five or ten year intervals) redesign or implementation of major data collection programs has been especially difficult when overall funding is held essentially level. One result has been delays in implementing activities such as the Consumer Price Index revision and various surveys describing the health status of the population.

At the Bureau of Labor Statistics, sequestrations required under Gramm-Rudman-Hollings will necessitate reductions in a number of activities originally planned for FY 1986. Among these will be: a decrease in the number of cities in which data for the revised CPI will be collected (from 91 to 77 cities), thereby preventing a planned 22 percent reduction in the variance of CPI estimates; elimination of estimates for 75 of the 280 cities for which employment, hours, and earnings data are published; a reduction of industry detail, a delay in collection, or a reduction in sample size for the occupational employment statistics program; postponement of work to improve Standard Industrial Classification coding in several major states; and deferral of work to develop price measures and employment cost indices for additional service industries. For FY 1987, BLS' proposed budget authority of $195.9 million, a rise of $9.3 million over the estimated level for 1986, essentially would allow BLS to meet mandatory increases in operating expenses. Three program increases are planned: expanding the Professional, Administrative, Technical and Clerical survey to improve the information base for preparation of federal pay recommendations; improving management of the BLS business establishment list and developing initial longitudinal data about business establishments; and strengthening security measures to prevent unauthorized pre-release access to the Consumer Price Index. Several program decreases are proposed for FY 1987: elimination of the Permanent Mass Layoff and Plant Closings program; reductions in the level of employment detail and/or the frequency of data collection in the Occupational Employment Statistics program; and reduction in area detail on employment in the Current Employment Statistics program. In addition, the proposed budget for FY 1987 does not include resources needed to revise the Standard Industrial Classification codes of industry establishments in BLS surveys.

The Gramm-Rudman-Hollings budget reductions for FY 1986 will require the Bureau of Economic Analysis to institute a hiring freeze, resulting in a projected staff decrease, as well as cutbacks in all administrative areas. For FY 1987, the BEA budget authority would rise $2.2 million over the 1986 level, to a total of $23.5 million. The Administration's proposal includes one program increase that would allow BEA to reimburse IRS for improvements in the tabulations of corporate tax return data required for preparation of the GNP measures -- thereby restoring cuts made by IRS in the size of the sample used to prepare tabulations, editing, and preparation of preliminary tabulations.

For the IRS Statistics of Income Division, a reduction in funding for FY 1986 was premised on gains in productivity and a proposed restructuring of the financing for programs that serve other agencies. For FY 1987, the Administration proposes a total budget authority of $15.5 million for the Statistics of Income Division, an amount that is $1.2 million over 1986, but still considerably below 1985. If anticipated reimbursements for work to meet needs of other agencies come to fruition, and recent advances in productivity can be maintained, the Division expects to continue its current level of activity. Any deferral of plans for continued modernization of its information processing activities, however, would endanger the Division's ability to maintain existing programs and services.

To meet the reductions required in its FY 1986 budget by Gramm-Rudman-Hollings, the Statistical Reporting Service at the Department of Agriculture has announced plans to discontinue a number of crop estimates, reduce some State estimates for dairy and poultry reports, make a number of changes in the program of prices paid reports, and modify survey dates for quarterly stock reports. In addition, SRS expects to delay modernization of its data gathering procedures, and to cut back plans for updating equipment. For FY 1987, proposed budget authority for SRS is $59.7 million, an increase of $3.5 million over 1986. Funding at this level would allow SRS to resume efforts to implement improved probability survey methods and to strengthen its data analysis systems.

The Energy Information Administration has proposed decreases in the areas of quality maintenance, modeling and analysis, and publication and inquiry activities to meet the reductions required under Gramm-Rudman-Hollings. For FY 1987, the Administration has proposed a budget totaling $59.7 million for EIA, an increase of $2.0 million from the 1986 level. EIA plans to increase funding for the Uranium Industry Viability Assessment program. For the most part, however, increases proposed for FY 1987 will be used to cover rising costs of administrative support services. In addition to continued reductions in the areas noted above, the FY 1987 budget for EIA anticipates elimination of the Financial Reporting System, the State Energy Data System, the State Energy Price and Expenditures System, and the State Heating Oil Grant Program, as well as decreases in several other programs.

At the Bureau of the Census, decisions have yet to be announced on how required cuts in FY 1986 spending authority -- approximately $8.4 million in total -- will affect specific current and periodic programs. For FY 1987, the proposed $91.7 million budget level for the Census Bureau's current programs provides an increase of $5.2 million over FY 1986, an amount that essentially will allow for continuation of ongoing activities. A modest increase in the business statistics program will result in expanded coverage of the transportation sector in surveys of the service industries. These data will be used in place of information previously provided by the Civil Aeronautics Board and the Interstate Commerce Commission. The second proposed increase in the current programs budget would provide funding for regular updating to maintain the accuracy and quality of the new harmonized international trade data system containing information on imports, exports, and domestic production. Two decreases for current programs are proposed in the FY 1987 budget request: surveys needed to update the Standard Statistical Establishment List would be reduced, and data on small retail, wholesale, and mining companies would be eliminated from coverage in the Quarterly Financial Report.

My testimony to this point has provided a general overview of trends in funding for statistical programs, and specific information on how programs will be affected by FY 1986 and FY 1987 funding levels. We find that statistical agencies once again will accommodate funding constraints by eliminating some programs, reducing the content and the geographic coverage of others, delaying the collection of information, and postponing the introduction of improvements that already have been identified as necessary. In addition, there will be further delays in modernizing data gathering procedures and in updating equipment; personnel levels will be cut back; and quality maintenance activities will be reduced. Many of the series that will be affected by these changes are the very ones that produce the data needed to assess what is happening to the economy and the deficit.

The Council of Professional Associations on Federal Statistics and the broader community of federal statistics users will continue to express concern about the fate of specific statistical programs. But we would also suggest the need to recognize several less immediately obvious and measurable effects that are fostered by the current policy and budget environment.

- Research to improve the quality of various statistical programs is needed, but agencies have found it increasingly difficult to fund such efforts as they have striven to continue fundamental data collection activities.
- Changes in the economy and society call for modifications of the concepts and definitions used in federal statistical programs, but the introduction of changes to keep statistical programs current frequently has been precluded.
- Technological advances would allow agencies to introduce new techniques that could improve the efficiency, timeliness, and quality of federal statistics, but such modernization has been delayed.
- Flexibility in allocating reductions in spending authority has been restricted, stripping agencies of the ability to manage limited resources most effectively.
- Decisions about which programs to retain or cut are made on an agency-by-agency basis, without reference to the relative importance of various programs in meeting societal needs, the effects of individual decisions on the statistical system overall, or the activities of other agencies.

- Attrition rates for statistical agency personnel are increasing rapidly, causing a decline in the quality of staff; and talented young people are less willing to enter or continue service in the federal statistical system.

Over the past several years the Council of Professional Associations on Federal Statistics, and many of its member organizations, have worked to identify and resolve key developments and issues affecting critical statistical programs. In our view, recent funding proposals of the Administration and budget decisions by the Congress have shown an increased recognition of the importance of these activities for the nation. Despite our sense that some improvements have been made, however, it is clear that statistical programs will be among those affected by measures that may be taken to reduce the federal deficit.

In the coming year, the Council of Professional Associations on Federal Statistics will redouble its efforts to assist the Administration and the Congress by identifying the most fundamental statistical programs, specifying the changes that would preserve or improve the quality of essential data series, and suggesting ways in which administrative record systems could be modified or enhanced to meet statistical needs. At the same time, we will endeavor to identify data series that could be produced less frequently, in less detail, or that could be eliminated entirely. The willingness of the Congress and the statistical agencies to hear our concerns and priorities in the past gives us encouragement that our efforts will be worthwhile.

We remain concerned, however, that the importance of maintaining and improving critical statistical programs will be overshadowed by a philosophy which suggests that information collection activities are in the first instance a burden -- something to be eliminated, regardless of the usefulness of the data that are produced. During the past 18 months, the Office of Management and Budget has developed and issued a circular on the Management of Federal Information Resources. Describing the responsibility of the Federal Government for collecting information, Douglas Ginsburg, who was until last summer the Administrator for Information and Regulatory Affairs at OMB, stated:

> Each of these information collections requires the expenditure of public and private resources that might be more profitably spent on something else. The more money we spend to collect, process, and disseminate information, the less there is available for government services.[6]

Mr. Chairman, we contend that the provision of high quality statistical information for use by public and private decisionmakers is, in fact, a vital government service. We find ourselves in agreement with former Commerce Undersecretary Sidney L. Jones, who argues:

> ...the policy environment for statistics should be significantly changed from one in which statistics are thought to be a burden upon respondents, a burden that is required to compete with other governmental spending programs for claims against

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[6] "Federal Information Resources Management: The Challenge of Change," Address to the Information Industry Association, September 20, 1984.

> the scarce resources of the Treasury. I think that should be changed to a policy environment in which statistics are considered to be the necessary foundation for making wise policy decisions or, at least, informed policy decisions.[7]

We look forward to working with your Committee and others in the Congress toward the realization of Dr. Jones' perspective.

This concludes my testimony. I want to thank you again for organizing this hearing and will be pleased to answer any questions.

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[7] "Statistics in Government Decision Making," informal remarks presented at the Census Bureau's First Annual Research Conference, March 1985.

Principal Federal Statistical Agencies
(budget authority in millions)

	FY 1985 Actual	FY 1986[2] Est.	FY 1987 Budget	CONSTANT DOLLARS[1] % change FY 1985-1987
Bureau of the Census				
Current programs	85.3	86.5	91.7	0.1%
Population and economic censuses	81.0	101.1	185.6	113.3%[3]
Bureau of Labor Statistics	186.9	186.6	195.9	-2.4%
Bureau of Economic Analysis	22.1	21.3	23.5	-0.9%
Statistics of Income, IRS	19.0	14.3	15.5	-24.3%
Statistical Reporting Service, USDA	58.3	56.2	59.7	-4.6%
Energy Information Administration	60.9	57.7	59.7	-9.1%
National Center for Health Statistics	42.8	44.7	50.0	8.9%
Bureau of Justice Statistics[4]	17.6	16.0	19.7	4.0%
Center for Statistics, Education[4]	14.1	12.2	18.3	20.6%
Research and Statistics, Social Security	7.9	9.9	10.8	27.8%

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[1] FY 1987 budgets for the ten agencies were converted to constant 1985 dollars using the GNP deflator for nondefense federal purchases other than the Commodity Credit Corporation. Estimated deflators for FY 1986 and FY 1987 were obtained by assuming that the costs of nondefense federal purchases would rise at the same rate as that forecast by the Administration for the overall GNP.

[2] Estimates for FY 1986 reflect Gramm-Rudman-Hollings sequestrations.

[3] The substantial increase in budget authority for periodic programs, from $101.1 million in FY 1986 to $185.6 million in FY 1987, reflects the need to complete preparatory work for the conduct of the 1987 quinquennial economic, agriculture, and governments censuses, as well as the build-up associated with the conduct of the 1990 decennial census of population and housing, including conduct of testing programs and preparation for the 1988 "dress rehearsal." Also reflected in the periodic programs portion of the budget is the need for improvements to data processing capabilities.

[4] Budget levels shown for Center for Statistics - Education (CS-E) and Bureau of Justice Statistics (BJS) do not include S&E from other departmental sources. For FY 1987, CS-E will have an estimated $5.5 in S&E budget, and BJS an estimated $2.2 in S&E budget.

Senator SARBANES. Well thank you very much, Ms. Wallman, for a very helpful statement.

I think we will hear from Mr. Duncan and then we will go to questions.

Mr. Duncan.

STATEMENT OF JOSEPH W. DUNCAN, CORPORATE ECONOMIST AND CHIEF STATISTICIAN, THE DUN & BRADSTREET CORP., AND CHAIRMAN, COMMITTEE ON STATISTICS, NATIONAL ASSOCIATION OF BUSINESS ECONOMISTS

Mr. DUNCAN. Senator Sarbanes, and members of the committee, I too, am honored to have been invited to comment on the vital topic of the quality of economic statistics.

I am pleased that the Joint Economic Committee is holding these hearings. It is especially helpful to have the paper entitled "Opportunities for Improving Economic Statistics," by Courtenay Slater.

Her paper provides several outstanding illustrations of challenges facing the Federal statistical system at this time.

I plan to add some comments concerning several of the issues she has raised. I would note that while I have not discussed in my prepared statement all of the topics she has covered, I believe that all of these issues that she has raised are important.

One reason that I am very pleased to be at this hearing is that, in my judgment, one of the difficulties facing the Federal statistical system is the fact that there is no clear center for oversight of the Federal statistical system in the U.S. Congress.

Statistical issues are periodically discussed by individual oversight committees such as this one, House Government Operations and the Subcommittee on Census of the House Post Office and Civil Service Committee. I have had the privilege of testifying over the past 15 years at several of those committees.

However, the statistical agencies are a small part of the total departmental budgets and Appropriations Committees, where many of the fundamental decisions are being made about priorities. These Appropriations Committees do not really have the opportunity to devote much time to the detailed analysis of some of the issues which are being discussed in this committee and in other oversight committees.

Further, as the Slater paper has so clearly pointed out, many of the source statistics for the national income estimates—or gross national product—are administrative records from nonstatistical agencies like the Internal Revenue Service and the Customs Bureau.

Thus, the Appropriations Committees often do not have a direct responsibility for dealing with these critical statistical issues.

I think we have all agreed this morning that one cannot make good decisions without having good basic information. We should start by acknowledging and emphasizing that America has always been the world leader in useful economic statistics. The people in the Federal agencies who produce our numbers are dedicated, competent, and sophisticated. And, thus, while we may criticize some of the shortcomings of the system at present, it is important to note the basic strength of the statistical system. This is evident at many professional meetings in the United States and around the world.

One of the problems that statisticians in Government face is that the issues being discussed are somewhat obscure, obtuse, or even viewed as arcane. So I am delighted at today's hearing because, first of all, we see that among three independent people who have prepared testimony the fundamental issues are the same, and in fact the fundamental perspective of what needs to be done is quite similar. That is because the statistical system is a public system, and the problems are very well known.

I think it is interesting that if we just look at today's newspapers, we see that this is not an issue for statisticians off in the corner. These are issues for the general public.

In today's Wall Street Journal, on page 1, Alfred L. Malabre, Jr., who periodically comments on the business cycle, states:

> Most economists had reckoned that the government's index of leading economic indicators would keep rising in January, so it fell sharply, and, most had forecast a further drop in February unemployment, so the rate rose sharply. And so it goes. No wonder that economists are a vanishing breed at many corporate headquarters.

It is not purely the economists that are having difficulties, it is policymakers of all breeds both inside and outside of Government. And one of the problems that policymakers and decisionmakers are having is the conceptual weakness of data like the leading economic indicators which Al Malabre was talking about.

Mr. Chairman, I request permission to submit for the record the following item from the Sunday Business Section of the New York Times. The article entitled "Those Misleading Economic Indicators," is by a very distinguished friend of mine, Professor Geoffrey Moore, former Commissioner of the Bureau of Labor Statistics, and now at Columbia University.

I don't want to quote the entire article today, but let me just read one paragraph to point out what I am going to say:

> Perhaps most significant, the economy keeps changing, so that a given set of indicators may not be as useful as it once was. New indicators emerge from the statistical mills, and we learn more about how the economy works. We may have reached such a point today. No indicator system, once established, should be left as is forever. Every 10 years or so, it needs a thorough review.

For 2 years the Federal agencies have been talking about such a review, but in the budget crises they have not been able to find funds.

Fortunately the Alfred P. Sloan Foundation has just released money to undertake a study, albeit a little more modest than originally proposed, to look at the U.S. leading economic indicators. So finally we are getting some action on this point, but it is somewhat deplorable that it has taken us so long to get there.

Another interesting item from today's press—Courtenay Slater spent a lot of time talking about the standard industrial classification—is in this morning's Wall Street Journal. If I may, I would like to insert into the record another article entitled "Service Concerns Feel Slighted by Federal Classification Code." It indicates a number of specific concerns. Let me just take one small quote at this time:

> . . . the Professional Services Council, which claims to represent more than 10,000 small- and medium-sized service companies. . . . estimates that service businesses provide about 70 percent of all U.S. jobs but account for only 40 percent of the categories in the SIC Code.
>
> That means many unrelated service businesses are lumped into single SIC classifications . . . while goods-producing industries are broken down in rich detail.

This reinforces the need for revising the SIC, as Courtenay has pointed out.

There is one final example from the press today that illustrates that we are talking about serious issues. Today, a page 1 New York Times article entitled "Gloomy Data Making Economists Uncertain on Outlook for Growth," had the following comment:

> . . . many economists believe that some of the basic information they are given by the Government to feed into their computers is increasingly unreliable. One notorious problem is measuring growth in the service sector. This is the largest part of the economy, and it has been steadily increasing its share of total employment. There are no realistic measures of output for institutions such as banks and others in the service sector or their productivity. Thus, according to economists, such as Mr. [Jerry] Jordan [former member of the Council of Economic Advisers], figures on the gross national output understate the true health of the economy.

In my prepared statement, Senator, I have commented on some of these issues in more detail. I am simply using this morning's paper to note that these somewhat technical and obscure issues are really vital to our Nation's well-being. And rather than quote my own testimony, I would like to submit it for the record at this point and highlight a couple of other points that are in my testimony.

Senator SARBANES. Fine. We will include your statement in full, and the articles to which you have made reference this morning will also be included following your statement.

Mr. DUNCAN. Thank you.

In your earlier discussion with Ms. Slater the question of policy coordination was raised, and it is also in my testimony.

The problem of statistical coordination has been with us for many, many years. It is not a new phenomenon, and it is not a result of Gramm-Rudman-Hollings or some drastic budget cuts in the last 2 years.

The problem started getting serious under President Carter's administration. At that time I was Deputy Associate Director of the Office of Management and Budget [OMB] with responsibility for the Statistical Policy Division. This office was transferred, as Courtenay noted, to the Department of Commerce in 1977 and then back to OMB in 1981.

At the time it was returned to OMB, it was not only placed in perhaps an inappropriate area although we might debate that for a moment—but the significant point is that the office was downgraded to a branch office, a level below what it was when it left. The staff was reduced from 29 to 9. That nine includes two clerical positions—one of which, incidentally, is unfilled at the present time. So there are eight people working in that office as of this morning.

This relocation of the statistical policy unit severely handicapped our Nation's ability to coordinate and improve the quality of government numbers. In my testimony I point out that the 20 percent reduction proposed in the standard statistical establishment list, which Courtenay referred to, is really a product of poor coordination, the right hand not knowing what the left hand was doing even so far as that particular line item in the budget was concerned. And we have many such examples.

My testimony covers concerns with productivity measurement, with the standard statistical establishment list, with the leading indicators, with a lack of research and innovation, and, in particular, with the problems of administrative records which are the basis for much of our economic information.

These are issues that have already been discussed to some extent. While my prepared statement is slightly different in its perspective, nevertheless the issues themselves are critical and the solutions are somewhat evident in many cases. Yet while there is a long list of issues, I have only touched on a few of the individual issues which could be addressed.

My purpose in appearing before you today is to underscore the need for such stronger leadership. I started out by talking about leadership in the Congress and coordination of leadership within the executive branch. There is, in fact, a need for leadership from business and from the users of statistics so that needs are better known. There are certain areas where the Government is the only institution that can develop credible and accurate statistical information.

I work for the Dun & Bradstreet Corp. We are a major provider of business information. I would be the first to point out the importance of Government information as a framework for any private information effort that is to be undertaken.

If we let Government's capability to develop sound statistics deteriorate, it will be difficult to recover. We will pay a very high social and economic price because decisions that have to be made will be based upon inaccurate information.

Strong, central coordination of our statistical system has never been more important than in the complex economic times in which we now exist. Lack of money and lack of skilled management in the statistical agencies of the Government is having a devastating impact on the quality of the Federal Government's statistics and on our ability to make good decisions. Action is required today if we hope to reverse the current trends that are so disturbing.

Let me conclude, Senator, by indicating that I do serve as chairman of the Statistics Committee of the National Association of Business Economists. I assure you that those of us who are in business and not directly involved in the development of these statistics stand ready to help providing whatever assistance and leadership we can to address what I think are some rather critical problems at the moment.

Thank you very much.

[The prepared statement of Mr. Duncan and the newspaper articles from the Wall Street Journal and New York Times follow:]

PREPARED STATEMENT OF JOSEPH W. DUNCAN

Mr. Chairman, and members of the Committee, I am honored to have been invited to comment on the vital topic of the statistical system of the United States.

I am pleased that the Joint Economic Committee is holding these hearings. It is especially helpful to have the paper entitled "Opportunities for Improving Economic Statistics" by Courtenay Slater. Her paper provides several outstanding illustrations of challenges facing the federal statistical system at this time. I plan to add some comments concerning several of the issues she has raised. I would note that while I have not discussed in my testimony all of the topics she has covered I believe that all of the issues that she has raised are important.

The Need for Congrèssional Oversight of Statistics

One of the difficulties facing the federal statistical system is the fact that there is no clear center for oversight of the federal statistical system in the U.S. Congress. Statistical issues are periodically discussed by individual oversight committees, such as House Government Operations and the Sub-Committee on Census of the House Post Office and Civil Service Committee. However, since statistical agency budgets are a small part of the total departmental budgets, appropriation committees do not devote much time to detailed analysis of some of the issues which are being discussed in this Committee and other oversight committees.

Further, as the Slater paper notes, many of the source statistics for the National Income Estimates--the nation's basic economic accounts--are administrative records from nonstatistical agencies like the Internal Revenue Service and the Customs Service. Thus the appropriation committees often do not have a direct responsibility for dealing with these critical statistical issues.

The Importance of Economic Statistics

As you know, decision-makers throughout government and the private sector rely on the federal government's economic numbers. The need for accurate and relevant statistics has never been more pressing, given the dramatic changes which are occurring in the national and world business landscape. For example, the massive shifts in the balance of trade between our nation and the rest of the world call for more, not less, attention to keeping our numbers as up-to-date as possible.

America has always been the world leader in useful economic statistics. The people who produce our numbers are dedicated, competent and sophisticated.

This is something we should all take a great deal of pride in recognizing. And while much of what I will say today focuses on the flaws in our statistical system, it is important to recognize that we have always set the standards for the rest of the world. This is evident in professional meetings of groups like the United Nations Statistical Commission and the prestigious International Statistical Institute.

This is why it disturbs me greatly that our statistical efforts are slipping. One key reason for this slippage is cutbacks in federal spending on activities which affect the quality of our national statistics. Courtenay Slater covers these slippages in her paper and testimony in great detail.

The Paradox of Productivity Measures

When we consider the quality of our economic measures, consider, for example, the paradox of measured productivity in the U.S. economy. According to estimates of the Bureau of Economic Analysis, productivity declined in 1985. Yet those of us in business know that corporations are merging to gain economies of scale. In other cases, firms are divesting unproductive assets and activities, and in general American business is working hard to keep unproductive overheads at a low level. Today, business survival is dependent upon becoming more efficient and cost effective, especially as U.S. business firms face extraordinary competitive pressures from import competition.

Productivity, as currently measured, went down last year because the number of measured hours worked went up more than measured output. Does the sum of business decision-making to become more efficient result in lower productivity per work hour? I am skeptical of the answer provided by our national statistics. It seems to me likely that our measures of output may be deficient and that the economy is stronger than the productivity measures suggest. For example, much of recent job growth has been in small business. According to surveys conducted by The Dun & Bradstreet Corporation, 75% of the job gains last year were in companies with fewer than 500 workers in total. Are we correctly measuring the output of small firms?

The Need for Administrative Coordination of Statistical Programs

I am especially pleased to testify today, since before I accepted my current job as Corporate Economist and Chief Statistician for The Dun & Bradstreet Corporation in New York City, I served for eight years (1974-1981) as the Director of the Statistical Policy Coordinating Office of the federal government.

My main premise today is that most of our current statistical problems could be solved by better management and coordination of U.S. government statistics, including more aggressive Congressional oversight and analysis of statistical needs as I noted above. In the following paragraphs I will highlight trends during the past several years that have significantly reduced the ability of the executive departments to plan and coordinate statistical programs. Further, I believe that the record shows a lack of interest in facing the critical issues that need to be addressed.

Think of the implications if we do not act to upgrade the quality of our economic numbers. The spending of literally billions of public and private dollars is shaped by the ups and downs of the Consumer Price Index, the Gross National Product, the unemployment rate and other key indicators cranked out by federal agencies. A few illustrations of this point are provided in the Slater paper.

Given the clout of these government statistics, it seems logical that policy-makers would have keen interest in keeping them accurate and timely. But the surprising truth is that for years, just the opposite has been the case, especially as interagency coordination has been weakened.

The problem started getting serious under President Carter's Administration, when I was Deputy Associate Director of the Office of Management and Budget (OMB) with the responsibility for the Statistical Policy Division. This office was transferred to the Department of Commerce in 1977 and then back to OMB in 1981. The office was downgraded to a branch office (a level below division in OMB's organization) and the staff was reduced from 29 to 9 (including 2 clerical positions--one of which is unfilled at present). This relocation and weakening of the statistical policy unit severely handicapped our nation's ability to coordinate and improve the quality of government numbers.

The switch from OMB to Commerce, for example, was a major setback. The Commerce Department was already swamped with major statistical activities--and under Carter's 1977 order, this agency was suddenly responsible for coordinating the statistics of several sister departments as well.

Things had already started deteriorating at OMB when this move was made, by the way. At one time, OMB's statistical functions occupied fully one-third of the agency's entire staff--69 people, to be exact, in 1947 (when OMB was known as the Bureau of the Budget).

Thus, although the statistical policy function has been returned to OMB, its status, influence and capabilities are pathetic compared to the past.

The truth is that penny-wise and pound-foolish cutbacks as outlined in the Slater paper have virtually left federal statistics in a forgotten limbo. This situation is nothing short of shocking, given the fact that business managers, economists and policy-makers such as yourselves are utterly dependent on economic data. And as I pointed out earlier, in today's complex and changing world economy, up-to-date and accurate information is more essential than ever.

An Example of Poor Coordination

A current example of the weakness of coordination is a major Census Bureau program called the Standard Statistical Establishment List. For a number of years there have been efforts to develop a standard industrial sampling frame for government surveys of business so that the various data collection efforts can be undertaken within a common framework. (There is more detail on this effort in the Slater paper.)

While there has been some controversy over the lack of legal-confidentiality protection in other government agencies that might draw samples from the common list, there has been wide recognition of the need for the U.S. Bureau of the Census to build and maintain a high quality list for the various surveys of the Bureau. Yet, the current budget proposal for fiscal 1987 calls for a 20 percent cut ($1 million) in the SSEL program on the assumption that the budget included funding for the costs associated with sharing. This administrative decision to cut funding for the SSEL developed as the result of a major misunderstanding of the fact that legislation to do sharing had not yet been submitted and therefore was not part of the current budget request. In fact, however, the basic SSEL budget request before the cut was for the production of the list. Sharing of the list is not possible with existing conflicts and restrictions in authorizing legislation.

Current Challenges to the Statistical System

As this overview makes clear, federal agencies are not collecting as much data as they have in the past, which means that there is a current shortage of reliable, consistent data. Economists have been the first casualties of bad numbers. Mainstreamers, monetarists, eclectics and supply-siders alike have watched their forecasts go up in smoke in part because current economic statistics have not kept up with changing economic infrastructure and behavioral changes.

But the problem is not a "malaise" that suddenly struck economists at the Council of Economic Advisors and elsewhere. The problem is that the reliability and conceptual relevance of federal statistics, the stuff of which economic forecasts are made, has clearly declined.

The upshot is that in Washington and on Wall Street, things have never been more dismal for the dismal science. Congressman Jack Brooks, commenting on the reduction in proposed funding for federal statistical agencies in fiscal 1986, noted recently that "if any further cuts are made in many of the statistical agency budgets, the basic quality of the information base that our nation's leaders use to guide their decisions will be in serious jeopardy."

What is the State of the Leading Economic Indicators?

A specific question being addressed at this hearing is: "What is the usefulness of the leading indicators in business forecasting?"

First, as I am sure other business economists have told this Committee, no one indicator or set of indicators is sufficient. Firms of all sizes use a variety of government data to make critical judgments that affect their companies.

Yet the leading indicators receive a great deal of attention in the press, financial markets and among policy-makers. But the record shows that the leading indicators have been inconsistent, and therefore unreliable, forecasters of future developments. The fact remains, however, that they continue to be closely watched and clearly have an impact on millions of daily decisions.

While at the Office of Management and Budget, I was involved in the 1975 revision of the economic indicators. The impact of inflation was our big concern at that time, since many of the indicators were being severely affected by the dramatic increases in the rate of inflation during that period. Thus we gave particular attention to the problem of using yardsticks and measures that were not artificially influenced by soaring prices.

Today, a new set of problems and criticisms plagues the economic indicators. First, the impact of foreign trade and the deficit on net exports is not reflected in the current components of the leading indicators. This factor alone is enough to make the usefulness of this much-watched statistic questionable.

And there are other flaws. The figures that are published and used are often subject to wildly-swinging revisions, which makes it nearly impossible to come up with a correct current interpretation--and the "lead times" are highly variable, which means forecasters must often deal with stale instead of fresh information.

Finally, the current measures used in the economic indicators do not adequately reflect the importance of service industries--which, as we all know, is a key and growing part of America's economic picture.

These are major problems. The trouble is the lack of action to correct these problems--something that deeply concerns those of us who care about the quality of the federal statistical system.

A proposal to invest in a careful revision of leading indicators has gone unfunded during the past two years because statistical agency budgets are tight. Fortunately, a private sector effort is now being started, but it should be noted that the leading indicators are a basic and important federal - not private sector - responsibility. The Sloan Foundation has just agreed to fund a study by the Center for International Business Cycle Research at Columbia University, as noted in press releases issued at the end of last week.

Of course, focusing on a single statistic such as the leading indicators is not enough. The languishing activity in government statistics will have long-term implications that go far beyond the problems of a cutback in one individual series. It is the lack of attention paid to statistical methodology that disturbs me most, and I will now turn to that issue.

Stagnation Leads to Deterioration

"If economic statistics are not continually improved, they will deteriorate."

--Geoffrey Moore

The above statement was set forth as a basic proposition in the social sciences by Geoffrey Moore at a meeting of the American Economic Association in 1984. Moore, former Commissioner of the Bureau of Labor Statistics and current Director of the Center for International Business Cycle Research at Columbia Business School, shares my growing concern about the health of government statistics in the face of continuing pressures to cut federal expenditures.

No one would be too worried if the budget cuts simply eliminated programs of marginal use or relevance. But the impact of cuts in critical statistics is already having a significant fallout that goes far beyond Moore's concern, for research and innovation, since our numbers are actually getting worse instead of better.

I see three fundamental problems emerging, in the following order of importance:

1. Weaknesses in source data for the National Income Accounts, which measure the economy's growth.
2. Reduced federal resources--in terms of money and people--for key statistics, in the face of ever-growing and more complex statistical needs.
3. Elimination of key projects that we badly need to analyze the long-term impact of immense social and economic changes.

Source Data: Two major factors are affecting the source data which are used to measure national economic trends. These are deregulation and budget cuts.

I want to emphasize a point made in Slater's paper -- most economic statistics are generated as the by-product of government regulatory and administrative functions. For example, the U.S. collects duties on imports and the customs activity leads to the trade statistics.

As deregulation has taken hold, many of the surveys and reports that helped generate economic statistics have been eliminated. OMB estimates that reporting requirements have been cut by 30 percent in the past three years. While less government paperwork is generally beneficial, it does result in reduced source material for government statistics. Statistical needs can be met by carefully designed sample inquiries and other methods, but unfortunately deregulation has proceeded without setting up these alternative procedures.

Budget cuts in federal agencies have also blitzed our basic data sources. First, processing of important records has been delayed or eliminated. Second, statistical support functions have been cut back. For example, the sample of income tax forms used for the Statistics of Income program has been reduced, which certainly impairs the reliable detail that was once generated.

In short, the raw material for statistical analysis has been reduced, and thus the basis for estimating many key statistics has been weakened.

New Statistical Problems: Still another deterrent to the government's collection of reliable statistics is the public mood of "let's get the government off our backs." This has led to a suspicious attitude when citizens are asked questions by federal-statistics gatherers. William Hill, director of the New York Regional Office of the Census Bureau, has commented: "Interviewers are encountering more problems in gaining access to and eliciting the cooperation of the public."

There are many reasons for reduced public cooperation with federal interviewers ranging from a greater awareness of privacy rights and fewer women remaining at home to answer the government's questions.

Unfortunately, these sociological changes have come at a time when budget cuts have reduced resources for time-honored "quality checks" such as repeat calls that confirm previous responses.

Long-term Analysis: An added problem resulting from budget cuts is that new research in long-term issues is either dwindling or totally eliminated.

For example, a worthwhile long-term project that has hit the cutting-room floor is the longitudinal Parnes Studies of labor force behavior--a set of surveys conducted since the late 1960s. Earlier data collected in this survey generated a wealth of understanding of the social dynamics of labor-force behavior. The results are central to the development of social policy that deals with issues of age discrimination, job mobility, and relating vocational education to labor market needs.

Much of the research that is necessary to develop better understanding of new social and economic structures, to prepare for more efficient statistical programs, and to properly evaluate information that has already been collected has been dropped as a result of the growing budget pressures on the agencies that would normally fund or undertake these basic efforts.

Problems with Economic Statistics are Longstanding

Nearly 10 years ago, OMB released the results of an in-depth review of the statistical underpinnings for the government's measure of Gross National Product--the national income and product accounts. This study was known as "The Gross National Product Data Improvement Project."

The review committee, which included such leading economists as Alan Greenspan, made over 150 recommendations for improving the quality of the statistical data gathered by the government. The total estimated cost of the improvements in 1972 dollars was less than $25 million--a mere "drop in the bucket" of the budget's billions.

Unfortunately, during the 10 years that have followed the study, few of the recommended changes have been adopted. As a result, much of the federal statistical data now used by the government, business and academic economists for research and decision-making remain flawed.

For example, in spite of the fact that we now all know that the U.S. is a services-based economy, the basic federal statistics still focus on the manufacturing sector. This is clearly unrealistic, since today an estimated 70 percent of total employment is in service industries. As noted in the Slater paper, the nation's Standard Industrial Classification (SIC) system, is much out of date. Currently, the SIC system has 140 three-digit classifications for manufacturing firms, but only 66 for services. The bad information on the economy's direction that results from this bias is shameful; we know less about the key sectors that are currently driving our economic activity than we know about narrow supply sectors within manufacturing.

The lack of detailed information on the services sector has profound implications in terms of the value of federal statistics. Trade is perhaps the best example of why we may have no idea of where we're at. The recent strength of the U.S. dollar has resulted in a tremendous influx of less expensive foreign goods which compete with America's manufactured products.

Clearly, this puts strong pressure on domestic producers. But the benefits to U.S. services, such as warehousing, finance, distribution and retailing industries, is unmeasured. Right now, it is virtually impossible to evaluate the total economic impact of imports during the current business expansion.

This lack of information becomes painfully clear when one considers that Congress is now under strong pressure to limit the flow of imported goods. How can law-makers evaluate the pros and cons of this issue without accurate information?

The sad fact is that U.S. statistical policy simply has not kept pace with the restructuring of the U.S. economy. There is evidence that after the last recession, large corporations decided to use outside technical services instead of rebuilding their internal staffs. We can see this in the strong growth of temporary help agencies and small business service firms.

The answer to this question, from a federal policy standpoint, is extremely important. Yet no one really knows whether or not large U.S. firms are hiring more temporary workers in an effort to avoid Federal employment regulations (which call for unemployment compensation or safety-and-health regulations) or whether this is a drive for more efficiency. In any case, the use of outside numbers distorts our analysis of employment by industry, since manufacturing employment is understated when outside firms supply direct labor.

A Concluding Note

This statement has only touched on many of the individual issues which should be addressed. My purpose is to underscore the need for much stronger leadership--in Congress and in the Administration--of a major federal task: the development of sound statistical information for public and private decision-making.

There are certain areas where the government is the only institution that can develop creditable and accurate statistical information. If we let government's capability deteriorate, it will be difficult to recover, and we will pay a very high social and economic price because decisions that have to be made will be based upon inaccurate information.

Strong, central coordination of our statistical system has never been more important. Lack of money and lack of skilled management is having a devastating impact on the quality of federal government numbers.

The world is changing. Action is required today if we hope to reverse current trends that are afflicting our economic numbers. The longer we wait, the higher the odds are that we will have even more serious statistical problems in future years.

(From the Wall Street Journal, Mar. 17, 1986)

In Most Expansions, Peculiarities Are Usual

NEW YORK

The progress of the current economic expansion has seemed of late almost to defy prognostication. Recent illustrations of this unpredictability abound. Most economists had reckoned that the government's index of leading indicators would keep rising in January, so it fell sharply, and most had forecast a further drop in February unemployment, so the rate rose sharply. And so it goes. No wonder that economists are a vanishing breed at many corporate headquarters. But just how unpredictable, really, is this expansion, now in its 40th month? With its peculiar twists and turns, does it really defy a sensible assessment?

There's no question that this expansion, in its behavior month by month and even in the somewhat longer term, has confounded most forecasters much of the time. However, this has also been the rule in most past expansions, especially those that persisted much longer than usual, as this upturn already has done. The miscalculations in the past, it should be added, often were far graver than a missed twist of the leading-indicator index or the unemployment rate.

In the expansion of 1975-80, for example, the longest peacetime upturn on record, most economists were convinced that a new recession would begin about a year before one actually did start. To their consternation, the economy kept expanding, the stock market kept climbing and employment reached a succession of new highs.

At the time, none of this continuing prosperity appeared to make sense. Interest rates were soaring, a seemingly ominous trend, and, in terms of income, consumers' savings kept dwindling while their indebtedness climbed to unprecedented levels. Since consumer spending accounts for about two-thirds of overall economic activity, the consensus was, quite logically, that a sharp retrenchment in outlays—along with a nasty recession—was imminent and unavoidable.

Consumers eventually did retrench and the recession did arrive, but much later than most economists had expected. In retrospect, it seems clear, the forecasters miscalculated because they failed to pay sufficient attention to the extent that homeowners were borrowing on their residences to sustain their spending levels. Aiding the trend was a sharp, sustained rise in most home prices.

Whatever misjudgments forecasters have made in the current expansion, the consensus at least has managed to remain right so far as the big picture—the economy's general course—is concerned. The prevailing view has been that the expansion would continue, and so far this has been the situation. Even in recent periods when the economy barely rose, most economists surmised—correctly—that the sluggishness did not signal the onset of a bona fide recession.

The consensus continues to anticipate recession-free growth, despite such disquieting news as the leading-indicator drop and the jump in joblessness, as well as last quarter's lackluster economic gain of 1.2% annually. Indeed, a quickening pace of advance is widely foreseen. This by no means rules out a new recession, it should be added. One could be brewing or even under way, for some recessions haven't been recognized until long after their onset.

Whatever does develop, it seems useful to bear in mind that expansions normally are marked by peculiarities that can affect their durability and vigor. And these peculiarities often aren't taken into full enough account, as happened with homeowner-borrowing in the 1975-80 upturn.

One well recognized peculiarity of this expansion is that interest rates have continued to fall for an unusually long time. Inerest rates normally do decline in the early stages of an expansion, but not after more than three years of rising economic activity, as is happening now. At this point in the 1975-80 upturn, rates were rising sharply, after having fallen sharply in the expansion's early stages.

Another widely noted peculiarity of this expansion is the intractability of the federal budget deficit. As a rule, when an expansion has been under way for very long, whatever budget deficit existed early on has sharply diminished or disappeared, a reflection of rising incomes and, in turn, rising tax revenues. But in this upturn, the budget deficit—for all the talk that it will narrow—is roughly as deep now as when the expansion began. In the first four years of the 1975-80 expansion, in contrast, the deficit dwindled from an annual rate of about $100 billion to nearly zero.

Still, another well-known peculiarity of this expansion is the size of the foreign-trade deficit. The fact that the deficit has been worsening, however, is the normal cyclical pattern.

There are other peculiarities about this upturn that have received relatively little attention. At this point in an expansion, the percentage of companies experiencing delivery delays normally is far higher than early on, but not so now. At this point, factory-operating rates, in terms of capacity, are normally sharply on the rise, but not now. At this point, the volume of new-home starts is usually in a clear decline, but not now.

The list goes on, and surely complicates the forecasting efforts. But business-cycle experience shows that this is nothing new. And another lesson is that sooner or later the familiar cyclical patterns do tend to reassert themselves. After all, consumers eventually did retrench in 1975-80.

—ALFRED L. MALABRE JR.

(From the New York Times, Mar.16, 1986)

Those Misleading Economic Indicators

By GEOFFREY H. MOORE

SOME discordant notes have sounded recently amid the steady chorus of good economic news. The index of leading economic indicators declined by six-tenths of 1 percent in January, which might lead someone to suppose that a recession lies around the corner. Immediately after that, total employment, an important "coincident" indicator that could signal a recession in progress, declined in February. And that bit of bearish news was followed on March 7 by a fall in the prime rate, an important lagging indicator, which might prove that a recession is already under way.

To pessimists, it all adds up to a grim 1986 and beyond. In my view, however, that conclusion would be wrong and would go far to prove why we cannot put much credence in month-to-month blips in the indicators. It also calls into question the accuracy of the three economic indicators — leading, coincident and lagging — which were last updated in 1975.

The United States can, in fact, look forward to stronger growth in 1986 than in 1985. The drop in the leading index was largely accounted for by one component, contracts and orders for plant and equipment. The February drop in employment, as reported in the survey of households, was partly accounted for by a weather-related decline in farm employment (the California rains), and in any case was contradicted by the rise in nonfarm employment as reported by employers. The drop in the prime rate was triggered by the Federal Reserve's decision to cut the discount rate to 7 percent from 7.5 percent. But this followed similar cuts by central banks in West Germany, France, the Netherlands and Japan, and reflected improved inflation prospects rather than general weakness.

All this serves to illustrate that one can easily take a too simplistic view of the economic indicators, which are useful tools when used with care and an awareness of their imperfections. The leading indicators sometimes foreshadow downturns by a year or more, sometimes by only a few months. They sometimes emit false signals, suggesting recession when all that occurs is a slowdown. Perhaps most significant, the economy keeps changing, so that a given set of indicators may not be as useful as it once was. New indicators emerge from the statistical mills, and we learn more about how the economy works.

We may have reached such a point today. No indicator system, once established, should be left as is forever. Every 10 years or so, it needs a thorough review. This year, the Center for International Business Cycle Research is conducting another review, with financial support from the Alfred P. Sloan Foundation and full cooperation from the Commerce Department's Bureau of Economic Analysis, which publishes the indicators. The objective is to re-evaluate the existing indicators, develop new ones and make the system more reflective of the economy we now have.

Here are some of the improvements that we can look forward to:

- Better coverage of the service industries, which now provide nearly three-fourths of the jobs in the country and more than half of the output. We need to give somewhat greater weight in the indicators to the service industries and a little less to manufacturing.
- More emphasis on foreign trade volume and prices, foreign credit and capital flows and economic indicators for other countries. At $150 billion, the trade deficit in 1985 did much greater damage to the economy than it did 10 years ago. And import prices obviously have a greater effect on domestic demand and on the inflation rate than they did a decade ago. We need to take fuller account of these things in the indicators.
- New leading indicators, including a new index of industrial materials prices, an improved measure of layoff rates, a monthly ratio of selling prices to unit labor costs and an index that shows how widespread the trends are in the leading indicators in various industries or across the country.
- A group of new leading indicators such as bond prices or the ratio of sales to inventories, which detect trends even sooner than the existing indicators, as well as a new set of leading indicators for inflation.
- More up-to-date figures on inventory changes, among the leading indicators, and on sales of consumer

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goods and capital goods, among the coincident indicators. Inventory changes might be more quickly detected if we used the National Association of Purchasing Managers survey. Retail sales and capital goods sales are available more promptly than total sales, the figure we now use as an estimate in the first set of coincident indicators.

The indicators have many deficiencies that cannot be fixed and never will be. Because they do not all move in the same direction, you have to decide what the dominant tendency is. The big increase in the February unemployment rate, for example, will probably not prove consistent with the other data. And we all want data promptly. But the price of getting it quickly is incomplete information, which is subject to revision.

Nevertheless, it is worth trying to fix what we can, because the indicators have a long record of successful performance behind them. For example, they helped to distinguish the "growth recession" of 1984 and 1985, when economic growth falls below its long-term rate, from a real recession, when the economy actually contracts.

This becomes evident when you compare the performance of the leading index in the three previous growth recessions with both its current performance and its behavior in the seven previous real recessions. While both types of recessions are preceded by a slowdown in the leading index, a divergence soon appears that distinguishes the real recessions from their milder cousins. Instead of continuing into the trough of a real recession, the indicators recover and begin trending upward. The current pattern thus resembles the growth recession scenario more closely than the other. That was a helpful and accurate diagnosis.

The leading indicators work because they reflect decisions that subsequently affect production and employment, or because they measure factors that influence such decisions. The volume of new orders is a leading indicator because in many industries production is geared to the receipt of orders. The average workweek is a more sensitive indicator than aggregate employment, because it is usually easier to change the workweek than to hire and fire employees.

Each of the leading indicators was selected for sound reasons and for good performance over time. In the case of stock prices, for example, the record covers more than a century and more than 20 business cycles. Moreover, studies of the same indicators in other market-oriented countries have shown similar results when tested on entirely new sets of data. As a result, leading indexes are being used now in more than 30 countries. The United States has led the way in this movement, but we have some work to do to keep in the forefront.

So the next time you see the leading, coincident and lagging indicators marching down in sequence, take a long look before running for the storm cellar. But don't wait too long. ■

(From the Wall Street Journal, Mar. 17, 1986)

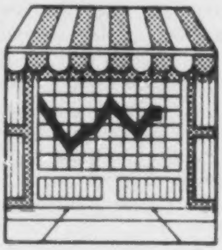
Service Concerns Feel Slighted By Federal Classification Code

By STEVEN P. GALANTE

Staff Reporter of THE WALL STREET JOURNAL

THE U.S. GOVERNMENT runs a numbers game, and it's stacked against service companies. Or so contends a group that represents service businesses and wants the rules of the game changed.

Its target is the Standard Industrial Classification Code, a set of more than 1,000 four-digit numbers used to classify U.S. industries and keep tabs on economic output. Established in the 1930s, the SIC Code is updated every 15 years. But critics contend the code isn't amended often or thoroughly enough to keep pace with emerging industries, particularly in technical and information services.



"It's basically a rear-view mirror of the American economy," contends Virginia Littlejohn, executive director of the Professional Services Council, which claims to represent more than 10,000 small and medium-sized service companies.

The council estimates that service businesses provide about 70% of all U.S. jobs but account for only 40% of the categories in the SIC Code. That means many unrelated service businesses are lumped into single SIC classifications, she says, while goods-producing industries are broken down in rich detail.

In agriculture, for example, "you have one code for a guy who grows tomatoes in a field and another code for a guy who grows tomatoes under cover," complains E. Neville Hunter, vice president for business development at Veda Inc., an engineering services company. "But in our business, you can't tell a nuclear scientist from a songwriter; it's the same code." Indeed, Veda falls into the "not elsewhere classified" category, a catchall heading that includes cloud-seeding companies, art restorers, industrial psychologists and newspaper columnists.

THE ISSUE IS of more than academic interest. Tax, trade and other policy decisions often are based on SIC Code data. Businesses sift SIC statistics to identify trends and market niches. Small service companies, though, worry most about losing government contracts, which are usually put out to bid with SIC Code specifications. Christopher T. Cross, president of University Research Corp. in Chevy Chase, Md., says his training-services company recently was effectively blocked from bidding on an estimated $250,000 Agriculture Department contract because the job was put into an inappropriate SIC category.

The Office of Management and Budget is working on a code update that is due to take effect next January. OMB has proposed a net increase of 18 new service industry categories, among other changes. But members of the Professional Services Council would prefer to see the current system scraped and a sophisticated replacement designed, using computer technology that wasn't available 50 years ago.

An OMB spokesman says that is unlikely. "In these tight-budget times," he says, "this is probably not the ideal moment to come forth with an initiative like that."

(From the New York Times, Mar. 17, 1986)

Gloomy Data Making Economists Uncertain on Outlook for Growth

By BARNABY J. FEDER

During the first two months of this year, many economists became steadily more upbeat about the outlook for the nation's economy. Their growth estimates rose as the dollar and oil prices fell, until their consensus neared the Reagan Administration's optimistic projection that the economy would expand at a healthy rate of 4 percent.

In recent weeks, however, doubts many economists harbored earlier have been revived by gloomy unemployment and production statistics, dismal trade figures, weak reports of retail sales and discouraging news from such blue-chip companies as General Motors Corporation and International Business Machines Corporation.

"There's no concrete sign of recession, but you can say that there are an awful lot of troubling elements out there," said Rudolph Oswald, the chief economist in Washington for the A.F.L.-C.I.O.

"You can't let the financial markets fool you," said one of the more pessimistic economists, Samuel Nakagama of the New York consulting firm of Nakagama & Wallace Inc., referring to soaring stock prices. On Friday the Dow Jones industrial average jumped 39.03 points, to a record 1,792.74. It capped a rise for the week of 92.91 points, making it the largest gain ever achieved in a five-day period.

Analysts attributed Friday's surge to statistics showing that producer prices and industrial development fell in February, leading investors to believe that those signs of a weakening economy would encourage the Federal Reserve Board to push interest rates lower, as it did earlier this month.

Weather Can Be a Factor

"Interest rates wouldn't be falling this way if the economy were as strong as some people say," Mr. Nakagama said. "The most probable development is a rebound in the second half of the year, but I think the situation is fairly serious."

Economists are wary of reading trends into monthly statistics, particularly those from the winter months when severe weather can play havoc with normal activity. Nevertheless, many forecasters who had raised their growth estimates on the basis of various indicators of economic activity that were published in January and early February are now reversing themselves or planning to do so soon.

These second thoughts have not led to predictions that the four-year-old recovery will come to an end. Indeed, falling oil prices and the lower foreign-exchange value of the dollar, coupled with a reduction in inflation and interest rates, add up to good prospects for continuing long-term growth.

However, if the more pessimistic of the economists turn out to be correct, the economy's growth rate in the first quarter of this year will be around 2 percent and sluggishness might persist into next summer.

Slower-than-predicted growth might benefit many consumers and businesses by reducing interest rates further. However, sluggish growth might also lead to higher unemployment and a bigger Federal budget deficit because of lower-than-expected tax revenues. There would be more problems for hard-hit sectors of the economy such as agriculture, energy producers and the banks and businesses that serve those sectors.

Neither optimists nor pessimists can be particularly confident about their projections these days.

"It's one of the most uncertain periods we have seen since the expansion began in 1982," said Daniel Van Dyke, senior economist in charge of domestic forecasts at the Bank of America in San Francisco. "We are spending a lot more time at work and tearing up lots of forecasts before they even get printed."

Interpretation of Data Differs

There is nothing new about economists disagreeing over how to interpret economic data. Currently, for instance, they debate such topics as how long it will take for the positive long-term effect of falling oil prices to compensate for the immediate economic blow the price drop has struck to the Southwest, oil-producing nations and businesses that trade with such areas. They also disagree over how long it will take American businesses to feel the benefit of the falling dollar in international trade and how much that will lift the economy.

More important these days, however, is the high level of uncertainty among all economists on such basic questions as where oil prices will settle, whether the Gramm-Rudman-Hollings deficit-reduction law will actually force the Government into major spending cutbacks and the direction of trade policy.

And there is another reason the prediction business has become trickier than usual. "Conditions are as uneven from sector to sector and region to region as I have ever seen," said Jerry Jordan, chief economist at the First Interstate Bancorp in Los Angeles, who has been working in this field for 20 years. Such diversity undermines the value of nationwide statistics.

Reliability of Data Desired

Moreover, some long-standing hazards for forecasters seem to be worsening. Economists are continually coming up with new ways to measure how well the economy is doing, with help from computers and improved data processing. But many economists believe that some of the basic information they are given by the Government to feed into their computers is increasingly unreliable.

One notorious problem is measuring growth in the service sector. This is the largest part of the economy, and it has been steadily increasing its share of total employment. There are no realistic measures of output for institutions such as banks and others in the service sector or their productivity. Thus, according to economists such as Mr. Jordan, figures on the gross national output understate the true health of the economy.

"In terms of output, the nation is better off than the figures suggest," agreed David Berson, chief economist at Wharton Econometrics in

Philadelphia. "We underestimate productivity and overall growth in both the service and small-business sectors." But the recent news has not been good.

During the last week in February, economists learned that factory orders for nonmilitary durable goods fell sharply in January. Also, I.B.M. announced that its earnings in the first quarter would be lower than expected, and it said it saw no sign of capital spending picking up later.

In the first week of March, the Commerce Department announced that retail sales were weak in February, that unemployment jumped sharply in February to 7.2 percent, from 6.6 percent, and that the length of the average work week and the amount of overtime fell. The department also announced that the statistics known as leading indicators (because they predict future economic trends) fell more sharply in January than in any month since October 1983.

Last week began with General Motors saying it would temporarily close four assembly plants to bring production in line with sales. Automobile analysts believe similar announcements from other car makers may follow.

Later in the week, it was reported that retail sales and industrial production fell in February. The week ended with news that business inventories and consumer debt grew in January — trends that point toward lower demand for goods and products in the future.

Estimates Revised Downward

Not just new statistics but also the revisions of previous estimates seem to be indicating stronger head winds for the United States economy. The latest Government estimate of the economy's annual growth rate during the last quarter of 1985 was 1.2 percent, just one half the rate originally calculated. And Friday's report that industrial production fell six-tenths of 1 percent in February was accompanied by a downward revision of the January figure.

Economists hasten to point out that some statistics, such as the February retail sales, were not as bad as expected. And other developments, for technical reasons, may not be what they seem. February's sharp rise in unemployment, for instance, appears to be largely explained by the special problems of oil-producing states such as Texas and California and by a correction of January's figures, which showed a surprising decline.

Not all of the reported figures are discouraging.

Lower interest rates and lower energy prices are driving down inflation, for instance. Increases in the prices for lumber suggest that the demand for new housing may be picking up soon. And the American Paper Institute has reported growing demand for boxboard, the material most widely used in packaging goods for shipment.

In addition, surging stock prices have added hundreds of billions of dollars to the wealth of the nation's households — on paper, at least. Based on experience in previous stock market surges, consumers are expected to increase their spending as a result.

"If you go back as far as Thanksgiving, we have gotten about as much good news as anyone expected, so to have a few weak numbers now is no shock," commented David Munro, general director of macroeconomics and international economic research in the New York office of the General Motors Corporation.

G.M., he said, is sticking with its end-of-January prediction of 15.25 million auto sales for the current model year, up from the 15 million predicted last September. "If we get two or three months of rising unemployment or weak retail sales," he said, "that's a signal to reconsider."

Senator **Sarbanes**. Thank you very much, Mr. Duncan.

I wonder if you both could elaborate for the record on the organizations for which you are speaking.

Ms. Wallman, if you could put into the record a bit more about the Council of Professional Associations on Federal Statistics and, Mr. Duncan, I guess if you could put into the record something about the National Association of Business Economists.

Ms. **Wallman**. The Council of Professional Associations on Federal Statistics is actually a coalition of 16 professional organizations, all of whom share a concern for the integrity, quality, usefulness, and accessibility of programs and products producing statistics from the Federal Government.

We have as our members people ranging from economists to actuaries to demographers to those involved in market research, public health, and a variety of other disciplines.

Basically we are in the business of communicating with our members about major developments that will affect Federal statistical programs and, by the same token, we work to communicate with officials in the administration and the Congress about the concerns of statistics users with respect to emerging developments.

Senator **Sarbanes**. When was the council founded?

Ms. **Wallman**. The council was established in 1980.

Senator **Sarbanes**. There was a very sharp concern I gather about 1982 as to what was happening to the Federal statistical base. Some of it was perceived to be occurring almost without intention or without knowledge, and I gather the council was very much involved at that time; is that correct?

Ms. **Wallman**. That is correct. In fact, just prior to the time that those rather substantial cuts were taking place, the council had become a full-time organization. We did work very closely with a couple of the congressional committees to organize hearings to bring some of the issues and concerns to the attention of Members of Congress.

Senator **Sarbanes**. Mr. Duncan.

Mr. **Duncan**. Thank you, Senator.

The National Association of Business Economists [NABE] includes several thousand economists who work primarily in business, as the name of the association implies. There is also, of course, the American Economic Association, which is the main professional body for all economists—business, academic, and government.

NABE focuses on issues with which the business decisionmaker is concerned. Therefore, the NABE membership tends to be intensive users of Federal statistics for market analysis and economic analysis at the individual-firm level.

The committee which I chair, which is called the Committee on Federal Statistics, was created in response to a growing concern among the membership about some of the problems facing government statistical agencies. The committee meets with government agencies to learn more about these problems and to make proposals for improvement that are of interest to the analytical community and business. But it also does several other things.

Last month, for example, we sponsored a seminar here in Washington at which some of the issues being discussed at this hearing were discussed from a slightly different perspective. The proceedings of that seminar, incidentally, Senator, will be published in Business Economics, the journal of the association. We will certainly make sure that you and your committee receive copies. I think you will find some of the papers of great interest.

Senator SARBANES. When do you expect that to be published?

Mr. DUNCAN. It will be published in July, but we will try to get copies to you before publication, if that is possible.

Senator SARBANES. That would be very helpful.

Mr. DUNCAN. The committee also tries to involve the membership at large by including articles in the monthly, as well as the quarterly, publications that go to the membership. So there is an intensive education program underway within NABE to make sure that the users of statistics (a) understand what the problems are, and (b) understand where, if possible, they can help correct some of those problems.

Senator SARBANES. In her statement, Ms. Wallman quoted from Douglas Ginsburg who, until last summer, was the Administrator for Information and Regulatory Affairs at OMB. He stated in an address he gave to the Information Industry Association in September 1984, and I quote:

> Each of these information collections [and this is talking about the responsibilities throughout the Federal Government for collecting information] requires the expenditure of public and private resources that might be more profitably spent on something else. The more money we spend to collect, process, and disseminate information, the less there is available for government services.

In a sense he is suggesting that this information is not a government service, and, in any event, gives it obviously a very low priority.

And, of course, she went on to quote from Under Secretary Sidney Jones about the importance of the statistics for the policy environment.

But I wondered, Mr. Duncan, within your profession what the attitude would be toward this Ginsburg statement?

Mr. DUNCAN. Well, you will obviously find many different people with different perspectives on that topic. Let me give you an overview statement which relates to the testimony that we heard today.

A very large proportion of the statistical output of the Federal Government is a byproduct of normal regulatory functions that are part of government. We talked a lot this morning about how the Customs people review imports, generating statistics on foreign trade. Or when bank regulatory agencies monitor bank transactions, we get information about monetary trends, and so forth.

Much of what the Bureau of Economic Analysis does, in fact, is to take information from the various administrative areas of government and weave it into a whole cloth, painting a portrait of our economic activity.

Now when you talk to businessmen about reports to the Federal Government, the first thing they think about is mandatory regulatory reporting. I think you will find there is a lot of pressure over time from the business community—from the small businessman to the large businessman—to reduce what they call the "reporting burden" of providing the Government with regulatory information.

Part of that concern is, perhaps, that they really don't want to be regulated. But the concern also occurs because, in the process of regulation, it is very easy to develop very cumbersome forms that must be completed to cover all possible dimensions of a regulated activity. And it is indeed true that many of the forms the Government uses continue to be cumbersome and complex.

The forms we are all familiar with—the biggest in terms of burden of government—are those of the Internal Revenue Service. Over the years they have become more and more complicated, not less and less complicated.

So from the perspective of the pure information activities of the Government, there is a public concern about the reporting burden.

Now if we address the issue of statistical activities, there are very few Government forms that are used solely for statistical purposes. The problem is, when filling out a form that is not mandatory, a comptroller will typically say that he has limited resources to fill out Government inquiries. If he is required by law to provide the information, he will. If, however, he is not required to provide the information, he won't. So less statistical information is being provided to the Government.

The social change that Sid Jones was referring to is, I think, that the respondents need to know more about the uses to which the information they are providing will be put. One of the things we are doing in our NABE committee, for example, is getting the economists to sit down with the comptroller of their company to explain the importance of completing accurately—not just completing, but completing accurately—the statistical forms that come from the Government.

We do need social change, I think, as Sid Jones has pointed out. But let's not be overly simplistic about it. Most of the resistance to providing information is at the regulatory level, and that is where the impact of government on business is pervasive.

Senator SARBANES. Ms. Wallman, how widespread in the executive branch of the Government do you think this attitude that Ginsburg enunciated is?

Ms. WALLMAN. I guess my answer to that would be that I personally find it one that has been increasing over the last several years. I don't mean to suggest necessarily just since 1980 either.

Joe Duncan has pointed out that beginning in the mid to late 1970's there was a stronger and stronger orientation toward the reduction of burden on people as a major responsibility of the Office of Management and Budget, and as the statistical policy function has become more and more consumed in an office that is primarily concerned with regulatory review and reporting burden issues, it has become more and more difficult for the values of information and statistics to be front and center in the consideration that is given to proposed reporting requirements.

Senator SARBANES. I would like to get from both of you what you think can be done to improve the coordination of Federal statistical programs to provide better management for them. We discussed this problem with Ms. Slater, and I think you heard that exchange, but I would be interested in your views on that.

Mr. DUNCAN. I think Courtenay Slater really put her finger on the options there are. My own personal preference would be to restore the statistical policy activity in the Office of Management and Budget to the status and power that it had previously.

On the practical side, because OMB has responsibility for reviewing all data collection elements, since it has responsibility for budget line items, OMB has all of the powers that are needed to correct the concerns that we have been talking about today.

And I don't see another place in Government to put statistical policy coordination where these tools or powers would be available to it.

For example, when our office was moved from OMB to the Department of Commerce, a letter of agreement was developed between the Director of OMB and the Secretary of Commerce. It stated that our office would continue to be involved in reviewing legislation which contains demands for new statistics, and for the review of statistical budgets as they related to an integrated statistical program. That, however, lasted for only one and a half budget seasons. At that point the budget examiners decided they didn't really have to follow that letter of agreement, because there had been a change of OMB directors, and because it was a personal and not a legislated requirement.

So over time that delegation deteriorated, as we suspected it would. My point is, the only place that has any real potential for bringing together true coordination—in terms of the power of the decisions that are being made—is OMB.

Now the alternative proposal of a central agency is quite controversial, and I think it would run into great difficulty in the Congress. What fundamentally happens is that each decisionmaking unit of government likes to have statistics relating to its own activities, and wants control over its priorities. So it is natural for individual departments to establish their own statistical agencies.

We talk about centralized statistics in Canada, but that is a misnomer. Statistics in Canada are not more centralized than they are in the United States. If you put BLS and Census together, there is more concentration of statistics in those two agencies alone than in the whole Canadian central agency.

It is also incorrect to say that statistics are centralized in the United Kingdom. What is centralized in the United Kingdom is a strong office policy, similar to the old OMB unit. The U.K. office also generates the national income accounts. So it is more visible and stronger, but the employment of statisticians in government is actually quite decentralized in the United Kingdom.

In France there is a statistical organization called INSAE. It reports to a very high level in the Cabinet and has great power. But, once again, when you look for the statisticians, they are found in the agencies where the programs are being run. France is actually becoming more and more decentralized.

My point is that once you get beyond the small nations, and the developing nations, no nation in the free world has a central statistical office or agency, because it is politically and administratively very difficult to do. If we could achieve it, I think it would be ideal. I don't think it is politically feasible, however.

Senator SARBANES. Ms. Wallman.

Ms. WALLMAN. With respect to the matter of strengthening coordination, I don't have any significantly divergent views to offer from those of my predecessors. I think one of the problems we do face is that with the kind of organizational structure we have now, there is no particular accountability for the statistical policy function anywhere outside of the Office of Management and Budget. There is no particular committee in the Congress that has been looking at those activities, other than to generally review what the office says it is doing.

I think what we don't know, except from the anecdotes we are presenting to you this morning and that others have presented elsewhere, is what is not being done. There is no systematic review of how effective or ineffective that policy function may be, and I would certainly argue in favor of something being done about that.

With respect to the issue of centralizing versus not centralizing, Courtenay Slater pointed out that there have been a number of studies on this issue, but perhaps it has not yet been studied enough. Our council has given some thought to perhaps setting up a small subset or expert panel to look into this.

I think the issues—the pros and cons—are pretty well developed and have been over the years. And as Joe Duncan has pointed out, the political viability of it is probably the biggest issue that we have left.

Senator **Sarbanes**. Well, of course, that is a broader issue and, as has been pointed out, there are a lot of pros and cons to it. It seems to me clear, though, that the coordinating function in the statistical area is something that OMB heretofore has done, and I take it from you at an earlier time done in a much more effective manner than it is being done today. Would that be correct?

Mr. **Duncan**. Senator, that certainly is correct. What many people forget is that in 1939, when the Bureau of the Budget was created as an executive branch agency, it was created by taking both the Bureau of the Budget from the Treasury Department and also a group called the Central Statistical Office that had existed from the mid-1930's, and combining them, creating a new unit called the Bureau of the Budget.

At that time the statistical staff was one-third the staff of the Bureau of the Budget, and their responsibilities were twofold. One was to create better statistical programs by assuring that the data collection efforts of the various agencies were coordinated and would yield good information. Second, they performed a number of innovative activities. One was to develop the first standard industrial classification. A number of people did the basic design work for the SIC system that exists today.

They were led by one of three Assistant Directors at the Office of Management and Budget and, therefore, had the ability to influence, at the highest levels, the priorities that related to statistical programs.

Over the years, that unit, that activity, has been pushed further and further down the ladder of the organization until today it is relatively weak and ineffective.

Senator **Sarbanes**. Mr. Duncan, you have been chairman of the U.N. Statistical Commission. I know we assert, and I think accurately still, that our statistical collection and presentation is the best in the world, but there is a growing concern about slipping from that standard. Is there an increasing focus in other countries on statistics? And I mention the Japanese emphasis because of some perception that they may in fact be using their statistics in a very effective way as part of their overall industrial and trade policy. Was that your impression from your work with the U.N. Statistical Commission?

Mr. **Duncan**. When you look at the broad world level over the last decade, I think it is safe to say that virtually every industrialized nation has been facing the same set of problems and deterioration of economic statistics that we see in the United States.

Almost every developed country today, for example, is trying to cut down on the size of government, to cut down on the amount of administrative information being collected, and certainly to cut down their statistical staffs.

For example, in the United Kingdom recently there was a 20-percent reduction in the staffing of statistical agencies. The Japanese case is somewhat more interesting. They are not centralized. They do have a Central Statistical Board, however, which includes people from both inside and outside of government. Most of the key members of the Board are from outside of government, but the government gives a very high level of attention to developing statistics.

To give you an example, at about the time we decided that social indicators were not a good thing for the U.S. Government to publish, the Japanese began publishing very elaborate statistical indicator publications, somewhat in the vein of the quote you gave this morning. That started, incidentally, about 8 or 9 years ago, when they focused on the quality of life as measured by their statistical indicators.

So I think they have had an interest in statistics, partly because, as you also know, the quality circle activity in Japan started as a statistical program of statistical quality control. Ed Deming, a former statistician from the U.S. Bureau of the Census, is now a father figure in Japan because of his work in quality control in the work place using statistical procedures. The most prestigious award you can get in Japan today is the Deming Award for having made a major contribution to improved quality.

Senator **Sarbanes**. Senator Proxmire.

Senator **Proxmire**. Thank you, Senator.

Mr. Deming has testified before this committee several times back years ago.

Earlier Senator Sarbanes pointed out at the very beginning that the Japanese have an advantage in that their statistical system really began after 1945 and ours goes back to 1790. Without the overhang they have had the same advantage with statistics as you might have if you built your plant postwar, which has given both Japan and Germany, I understand, some advantage.

Do you see that this has been an advantage? You say that all of the countries in the world have similar problems, but don't the Japanese because they did start their statistical system somewhat later have that advantage?

Mr. **Duncan**. It is a little difficult to answer that, Senator Proxmire. You mentioned the Germans, for example, having a clean slate in some sense and——

Senator **Proxmire**. Well, no, no. The Germans had a clean slate as far as—they go back probably long before we do. God knows when their statistical system started.

Mr. **Duncan**. I don't read Japanese, so I am not too familiar with the details of their historical statistics or even what they do now. I used to meet with Japanese statisticians periodically, both in the U.N. context and in U.S. meetings. My impression as we held our meetings was that they were working very hard to copy our kinds of programs and to develop statistics like our current population survey. But I certainly never held the view that they were in any way developing new and innovative procedures or new organizational systems that are better than ours.

What I said before is that they have given more attention to what they have, and they have made it a more central part of their activities, but that is a social attitude and not an administrative or bureaucratic statistical issue.

Senator **Proxmire**. Let me just say that my problem is that it is hard to change the statistical system once you have established it. For one thing, you have to change your comparisons, there is great resistance and everybody wants to say well, let's stay with the same thing. So we don't know whether they are progressing or not progressing even though the standards are not as applicable as they ought to be.

They started much of their, if not all, much of their base in 1945.

Mr. **Duncan**. In that sense you are right.

Senator **Proxmire**. Well let me ask you this. This morning's New York Times had an article which you may or may not have read. It was on the front page and it carried over, and it got into the statistical problem I thought in a very relevant way. They said this, and I quote, "Some of the basic information they are given by the Government to feed into their computers is increasingly unreliable," which was a complaint they quoted from some experts. "One notorious problem is measuring growth in the service sector. This is the largest part of the economy, and it has been steadily increasing its share of total employment. There are no realistic measures of output for institutions such as banks and others in the service sector or their productivity. Thus, according to economists, figures on the GNP output understate the true health of the economy."

Do you agree or disagree with that?

Mr. **Duncan**. Senator, I agree. In fact I quoted that article in my opening remarks a moment ago.

Let me go one step further. The testimony I submitted talked about productivity, and I think this is where we get a really clear picture of the problem.

Dun & Bradstreet, the company I work for, collects data from business at many levels. We follow the individual business enterprise very closely in terms of its income and balance sheet activities. We do surveys of the attitudes of businessmen surveys on employment changes.

Our contact with American business tells us that businesses across the Nation are working very hard to reduce their overhead, to tighten their belts and be more and more efficient, and yet government statistics tell us that productivity has declined. The view of a decline in productivity goes counter to the sense one gets by having hands-on contact with American businesses.

What is the reason? Well, the only reason I can think of is that the big change in the current economic business cycle has been a dramatic growth in both small business and service activities, and we don't measure these very well.

Let me give you a quick example. A business must file a form with the local labor department that tells how many people they employ, what their wages are, their social security withholding, and a number of other things.

But an increasing proportion of our population is working on contract.

Senator PROXMIRE. Are working on what?

Mr. DUNCAN. Working on contract. In other words, they will hire themselves out part time or to one, two, or three organizations. Under the wage guidelines, the business that hires these people does not have to report on the payments to them because they are hired on a contract basis. It is like purchasing an outside good.

Therefore, the statistics we get—the wages and the social security payments collected by small companies—understate their labor content.

Ultimately, of course, the information is retrieved because that person will have to file an income tax return. The company will file a 1099 with the IRS that there was a payment made to that individual, but it is only 2 or 3 years later that we will find out what the wage and salary profile really was.

I would suggest to you that with the tremendous growth of small entrepreneurial activities, and with the increasing tendency of people to be "off-line" from the standard employment reporting, that we are not measuring our output very well for those small enterprises. Now if you don't measure output and you measure the input—because we do count the people in the labor force through the household survey—that helps explain why our productivity measures aren't quite jibing with our experience in the field.

What I am trying to suggest, Senator, is that I agree with the concerns expressed today in the New York Times. It is indeed true that we are not measuring our economy accurately. Adjustments for the underground economy are made in the GNP accounts, but probably only about half of the corrections have been made, and so forth and so on. So, yes, we have problems

Senator PROXMIRE. It is true that there are no realistic measures of the output for productivity of such institutions as banks?

Mr. DUNCAN. There is a measure of output which we use in the national income accounts. That is the value added as measured by the wages paid to the people and the services and goods consumed.

Senator PROXMIRE. Well, you measure the output by the input then.

Mr. DUNCAN. That is right. And so by definition we are measuring a productivity level, but we are not measuring what is actually happening in society. For example, a word processor allows one to generate many more letters in a day, but we don't measure a secretary's output by the number of letters produced per week. Nor do we measure a reporter's output by taking into account the fact that a reporter at a terminal is now doing the typesetting that someone else used to do. Productivity in the publishing business has increased, but not the way we measure it.

Senator **Proxmire**. Could we measure the output of the financial institutions, for example?

Mr. **Duncan**. Of the which?

Senator **Proxmire**. Could we construct an objective measurement of the output of a bank?

Mr. **Duncan**. It is difficult to move beyond the concept of value added without making a lot of value judgments about the quality of that value added. We do make judgments about quality in hard goods. But we don't know how to make judgments about quality in the services sector, and that is why we have this difficulty.

Now the point I am trying to——

Senator **Proxmire**. I don't know how you can tell whether we are understating or overstating the GNP. The flat statement is made here that—now the New York Times made it and the reporters didn't make it, but he quotes expert economists who say that the figures in the GNP understate the true health of the eonomy. You don't know whether they overstate or understate it; is that right? We know that they don't give us a satisfactory answer.

Mr. **Duncan**. May I address that slightly differently. I made a comment before about small business—that we are not measuring value added of the small business sector adequately and therefore we are not measuring the total economy. It is true that when BEA makes adjustments 3 or 4 years from now because they have more complete information, we will probably revise upward our national account estimates for the current period.

Senator **Proxmire**. Three or four years from now we are advised of it?

Mr. **Duncan**. At that time we will know what the answer is, but we don't know what the answer is today because we don't have good techniques for capturing some of the structural changes in our economic system.

You asked me a second question, what is the value of the service sector. That is much more complicated. I don't know how to suggest the answer to that one. But if you looked into it, I think you would find an even greater divergence between the published numbers and the real activity of the economy.

Senator **Proxmire**. Of course 3 or 4 years from now it will be history and it won't be of as much value certainly as having it in a timely way. We don't know if we are going up or down or sideways.

Let me ask you this, and I would like Ms. Wallman to comment if she would like to do so.

Could some of the data that is now collected and sold by the private sector thereby permitting the Federal statistical agencies to concentrate their resources in areas where the private sector cannot successfully perform the work, could more of that be done in the private sector and more of the cost be shifted to the private sector? I am asking that because the practical problem we have with Gramm-Rudman, with the deficit and with the enormous pressures we have everywhere to hold down spending, could the private sector do more of this?

Mr. **Duncan**. Senator, the private sector is doing more of that as a practical matter. A large part of the information used in day-today decisionmaking is developed by what we call the information industry. A lot of firms are in the business of collecting detailed knowledge about a particular industry.

Just to give you an example, one of our divisions is a company called Petroleum Information. We track activity in every hole drilled in the United States for oil or gas. We know who owns it and how much production there is. All the oil companies buy the information because they want to know what else is happening in their area. That is not a Government activity. It is vital to the industry, however, and it seems to me it will continue for a long time.

But that is quite different from putting together a set of national income estimates—from all of the detailed information the Government has about transactions and activities in all aspects of society because of its regulatory functions and its data collection. There is nothing that equals, for example, the IRS as a data collection vehicle for economic activity.

It would be totally unrealistic to expect the private sector to try to duplicate any of that information, and it would certainly not be very good to ask the private sector to tabulate that information.

Senator **Proxmire**. I understand that. Now you have told me the reasons why you can't operate in some areas.

Mr. **Duncan**. Right.

Senator **Proxmire**. My question is, Are there any areas where the private sector might be able to do the job? Would we make any saving here by having the private sector do it?

Mr. **Duncan**. It is difficult to cite specific areas. Let me explain what happens. Today, the marketplace determines that. In those areas where the Government is not doing a good job from the point of view of business decisionmakers, entrepreneurs find a way to do it.

There are very few areas of overlap. The most glaring potential area of overlap is the current industrial reports developed by the Census Bureau. These reports look at specialized sectors of economic activity, primarily because the people in the branch of that trade association don't trust the trade associations to collect it, or because they think the Government can do a better job.

But were the Government to stop doing them, there is no question that someone in the private sector would move in and begin producing those reports. However, these reports are an inconsequential part of the Census Bureau's budget, and would have virtually no impact on the budget problems they are having right now.

Senator **Proxmire**. Ms. Wallman, let me see if you agree to that, and let me put it this way. I understand you point out the wide use of Federal statistics. Where could we appropriately charge more for these statistics which are so valuable to so many non-Federal users?

Ms. **Wallman**. I am not sure I want to answer that off the top of my head. I think that it has been our feeling that one should separate to some degree the functions of collecting information and the functions of disseminating information, and I think when we talk about information dissemination, there probably are increasing opportunities for the private sector to play that role. That, of course, is exactly what you are talking about in terms of thereby causing the user in certain instances to have to pay more for a product, particularly in cases where such services were provided by the Government free or at very nominal cost.

A concern that has been raised is what turning over information dissemination to the private sector means for what we sometimes call the unaffiliated user. We are not terribly concerned about the ability of Dun & Bradstreet to pay for the kinds of information it needs, and I think Joe Duncan will accept that.

On the other hand, we are concerned about small community users who want to get a hold of local area information, for example, for decisions they are making about their community development. And there is a real issue I think over what kind of users we are talking about or what kinds of information before we start making statements about turning over dissemination functions lock, stock, and barrel to private sector entrepreneurs.

Senator PROXMIRE. Let me indicate a little better where I am coming from. What I want to know is, How can we do a better job while spending less money in the statistical area?

Ms. WALLMAN. In the statistical area?

Senator PROXMIRE. Yes.

Ms. WALLMAN. I would hope that perhaps through better coordination of some of the things that are going on we might be able to make some more inroads. I think Courtenay Slater's study points out, for example, in the area of sharing business lists, that some economies perhaps could be achieved if we could only get past the current prohibitions——

Senator PROXMIRE. Any notion of how much we could save by better coordination?

Ms. WALLMAN. Excuse me.

Senator PROXMIRE. Any notion of how much we could have with better coordination? I am talking about coordinating Federal statistics more efficiently.

Ms. WALLMAN. My guess is it would not be a remarkably large amount, but I do not have an estimate to venture.

Senator PROXMIRE. You wanted to comment, Mr. Duncan.

Mr. DUNCAN. Senator Proxmire, I want to comment on the efficiency of dissemination, because there is an interesting case history that has emerged over the last decade. That is a program of the Bureau of Labor Statistics called LabStat, which put together labor statistics in a massive way so that they were available on a central computer. People could inquire about specific industrial prices or specific industrial employment.

And, in fact, a private sector suit was filed to prohibit the BLS from implementing it because it was competing with a private sector company that was doing a similar kind of thing—taking the Government data, putting it in the computer and then making it available on a time-sharing basis.

I think what has happened in the last couple of years is very illustrative. The economics of time sharing is no longer as promising as it used to be, because there are now so many other electronic media. We now have floppy disks, but before long we are going to have compact disks on which you can put 50,000 pages of information, just as you now have a whole symphony on a compact disk if you are using digital recording in the home.

My point is, the technology of data dissemination, or information dissemination, is changing dramatically. Telecommunication costs are coming down, and computing costs are coming down.

The sad part is that the Government is very slow to respond to those technological changes, precisely because of our appropriations process and decision process to install modern technology.

Today, BLS is beginning to disseminate LabStat on floppy disks and other media. So that particular example has actually now made it to the marketplace, but it took them 8 years after it was first proposed.

One of the areas for potential efficiency is to bring modern technology into government for dissemination, but it can be used for collection. There is a lot the Government can do with electronic collection of information. It is just now in a kind of test state, but over time I think will provide for more efficient statistical activities than is presently the case.

Senator PROXMIRE. Let me ask you this. We tend to add new statistical programs, but rarely stop producing old ones. Which statistical programs do you feel are marginal at best and could be eliminated and how much money could we save if we cut those programs?

Mr. DUNCAN. My first law of statistics is that every statistic generates a user. My second law of statistics is that every user wants data that are more accurate, more timely, and more comprehensive. These two laws are the environment in which the statistical agency operates. Therefore, if you go through our list of statistics one by one, you will find that for every set of statistics there is a set of users who will howl and scream if one is eliminated.

You asked for some suggestions. We invested a number of years ago in energy statistics because we were woefully out of date with understanding anything about the energy world. We didn't know anything about sources and uses of energy at the very broadest level, and we invested an enormous amount of money in creating some new surveys and some new statistics. And now over the last several years those are being cut and I think appropriately so.

Some of those statistics can now be gathered in ways that don't require the elaborate mechanisms that were put together. Where these statistics are valuable in the marketplace, there are other institutions that are providing them. So we can probably cut some more there.

In agriculture, I would argue, we have vast overinvestment in relative terms. We collect agricultural statistics on every commodity in every State, and we conduct various surveys all year long to help the individual commodity producer. We are investing a lot of money in that although we are no longer an individual farming economy. We are now basically an agribusiness economy. The people who are benefiting is not the little farmer who needed that detailed information in the past——

Senator PROXMIRE. So you are saying that we can get along without as much of that.

Mr. DUNCAN. We still need to know broad crop estimates and other things, but we don't need all the detail we have there.

Senator PROXMIRE. For energy and agriculture.

Mr. DUNCAN. Right. Those are the two examples I gave you.

Senator **Proxmire**. Ms. Wallman, would you like to add to that, or is that about it?

Ms. **Wallman**. I suppose those are probably the two biggest areas. I think there are other areas where there are smaller subsets of information that perhaps are duplicative. Perhaps in these stringent times we need to look at ways to put the information sources together in better ways, and I think that individual users are trying to start to look at those kinds of things. Again, I don't think they will be big money items if you are talking about the overall deficit problem, but they might make some modest inroads.

I think what Joe Duncan has just said about the relative overinvestment in agriculture statistics points to an issue that we feel is very important and which I mentioned briefly in my testimony, and that is that really no one is looking across the board to make decisions about how we are going to invest in our statistical activities. We don't know at this point when someone says that we are going to cut the sample size for the health interview survey in half, for example, how that stacks up in our national priorities against getting the report on filberts or some other particular product from the Department of Agriculture.

Those decisions are being made in totally disparate departments and agencies and by totally different committees on the Hill and no one is trying to stack up how those decisions affect us overall in terms of our information availability.

Senator **Proxmire**. I have asked my mean questions, and I want to conclude with just one question that's a little happier. If you had an additional $10 million to spend on statistical programs where would you put it, and if you had an additional $100 million where would you put it? So dream ahead and tell me what they are? [Laughter.]

Mr. **Duncan**. The $10 million I think is fairly easy, and I think Courtenay laid a very good groundwork. I think the standard statistical establishment list needs to be improved and not reduced, and the work on the recording of the standard industrial classification needs to move forward. It turns out that $10 million would basically cover those two tasks. [Laughter.]

So I don't have anything left over for other suggestions. If we felt we didn't want to invest in those mundane kinds of things and wanted to do something more exciting with the $10 million, I would suggest that we would get a very large return from $10 million invested in some research and exploration into refining the concepts behind almost all of our individual programs. Courtenay mentioned income. I would mention the service sector.

If you planted that money across all agencies, I think you would get a very sharp, long-term return because what we are suffering today is a lack of research and innovation. Many of the agencies are working very hard just to keep up with current demands, and are not spending enough effort looking ahead. But then that $10 million, unfortunately, would have a price to it. It would tell you how to spend that $100 million.

Senator **Proxmire**. Ms. Wallman.

Ms. **Wallman**. I would certainly concur with what Joe Duncan was saying. I think the one thing that we might add to that is, or I might add to that is on the ongoing problem that the statistical agencies are having in terms of updating their equipment and keeping up with technology. It is very difficult to demonstrate to anyone the payoff that there will be further down the road when all the problems seem to be so immediate, and if one were talking about much larger numbers, and not the $10 million level, then that might be something that should be investigated.

I quite agree with Joe Duncan that perhaps some of the immediate research that one did would lead into figuring out exactly where larger amounts would be well expended.

Senator PROXMIRE. Thank you.

Thank you, Senator Sarbanes.

Senator SARBANES. I just want to add a couple of points. I think that something that Ms. Slater said in her study is important to keep in mind, given the questioning we have had in the last few minutes. She said, and I quote her:

> In identifying statistical improvement need, emphasis has been placed on those potential improvements requiring modest, if any, additions to agency budget. Special emphasis is placed on actions that would achieve budget savings while maintaining or improving data quality. Important examples of such savings exist. It should not be supposed, however, that in total it is possible to simultaneously reduce spending and improve data quality. Budgets are already lean, and further large cuts could mean starvation. The consequences for our ability to measure and understand economic developments could be quite serious.

And then later in her study she says:

> After a decade of continuously tight budgets there is little room left for absorbing further cuts through increased efficiency or greater attrition of general research and development efforts.

My sense of it is that we have been through nearly a decade of great stringency in this area, we are not in a situation, therefore, where we have seen such laxity that lots of things that could be closed out at no loss. Most of that has already been done. Achievable improvements in productivity have been obtained and we are now at the point of really placing in jeopardy some important statistical series.

I wonder if you would tend to agree with that perception.

Mr. DUNCAN. Senator Sarbanes, I sat on the firing line at OMB starting in 1947, and I would say that starting with the 1976 budget we really began a period of no new starts in statistical programs. So it has been a decade. I think we have had a decade of very little enhancement or improvement of statistical programs.

One exception to that was energy. We did invest an enormous amount of new money in energy statistics during the last decade, but we have brought that back down.

So I am basically agreeing with your perspective and reinforcing Courtenay's point. You know, during the 1960's statistical programs grew between 12 and 14 percent per year. That was in part because we were creating new social programs. We created statistical programs to go along with those programs to understand their impact. Many of those programs have now been cut back to very minimal levels.

And certainly our basic statistical activities—the economic statistics that we have been talking about today, which got some side benefit for their growth in the 1960's, but really didn't get a whole lot for themselves directly—have been squeezed now for several years.

Let me give you a quick example. In 1976, while I was at OMB, we issued a report titled "Gross National Product Data Improvement Project." Senator Proxmire, I think you sat in on some hearings on that project, as I recall, which recommended a number of conceptual and database improvements in order to get better estimates of our national income accounts.

The total price tag in 1976 dollars was about $25 million. Sitting here a decade later, we have implemented virtually none of those recommendations. So when you look at something like the national income accounts—the core of our economic decisionmaking—we are looking back on a decade of very little innovation.

BEA is to be commended because they just made some improvements in their 5-year quinquennial rebenchmarking. They have made some improvements, but they are limited because they can't get into many of the areas where we need better information, such as inventories, plant equipment investment, and so forth.

So there is a long list of what needs to be done, and we have not done it. And when you face the agencies with the 5-, 10-, and even 20-percent cuts that are being talked about, how are we going to have very serious byproducts for that? Of course, for our statistical agencies it is a trivial amount of money relative to the Federal deficit, but it is a lot of money for the agencies when you are talking in millions of dollars.

Senator **Sarbanes**. Ms. Wallman.

Ms. **Wallman**. I would certainly concur in your observation. I think that in addition to the trend that Joe Duncan has talked about since 1976, that in the 1981–82 period that you cited earlier, we did see very large across-the-board cuts in the statistical programs, and I think that is in fact the time when those programs that really were considered to be of low quality and those that were considered to be so obsolete that they would need a major influx of money in order to bring them up to speed, those programs by and large were eliminated at that point.

My observation and assessment of the budgets at least for the major statistical programs in 1986 and 1987 suggest that we really are cutting into meat and not fat in those programs, and if we look toward sequesters or some other means of cutting the budget by 10, 15, or 20 percent in 1987, we are talking about total programs disappearing. I don't think there is any question about it.

Senator **Sarbanes**. Let me ask just one further question. Let me take the Flash GNP figure. Now that is being eliminated. In terms of social costs overall to the society, economic costs, we may not gain anything. The amount of resources put by the private sector to develop some comparable figure they can use may outweigh the amount of resources that the Federal sector does not use to do it and you will have a less reliable figure. You will have a lot of conflicting figures out there.

So to the extent that one talks about shifting statistic gathering and dissemination, particularly on those series that are part of the underlying base from the public to the private sector, it is not clear to me that that necessarily would be an economic saving or would enhance the reliability or dependability of the statistics even if it were done.

Now it is true the Government may not spend the money, but the private sector may in fact spend more to do the same job, and the willingness of people to rely upon or depend upon those figures may be diminished. Is that not a problem?

Mr. DUNCAN. Senator, I think you are touching on perhaps the one statistic which is, in my judgment, an anomaly, and that is the Flash GNP estimate.

First of all, if Dun & Bradstreet issues an estimate of Flash based on my detailed analysis of all of our corporate information, it is not going to have any impact on Wall Street, or it is going to have very little impact on Federal decisionmaking, because it is just a private organization making a private estimate about a national figure. Everyone would know that I don't have the wherewithal to know the twists and turns of the data that make up the national accounts.

The same thing would be true if Merrill Lynch issued it. No private-sector company issuing a Flash estimate is going to have any impact on decisionmaking. It may be true that if 50 people make different estimates, the total expenditure of time and effort to make those estimates was more than BEA would have had to do on its own. I would just argue that it is a misdirected private effort. That is why I say that it is an anomaly. I don't really think that is a good example.

My earlier comment was that if you take the basic economic indicators such as the national accounts and their various components—and there are a whole series of surveys that come out of Census and BLS measuring what is happening in our economic activity across the Nation—no private sector group is ever going to substitute for that in a realistic way.

What I do believe is that where people want more information about individual activities, there are opportunities for private-sector companies to do that. And in fact they are doing it.

Purchasing agents today are providing a valuable service to analysts. They have one of the best surveys around on the tone of business. On a monthly basis they ask the purchasing agents, people who are sitting there on the firing line, what is happening. Are deliveries increasing or decreasing? They know the information, and they do a good enough sample to get useful information on the tone of the economic situation.

That is a service, and the Government can probably duplicate it. But why? The private sector activity is sufficient.

Senator SARBANES. Well, would you say at the moment that you think the line is in a pretty reasonable place between Government-collected statistics and the efforts in the private sector in the statistical arena is in a reasonable place? Do you see a lot of Government-collected and disseminated statistics that you think should be shifted into the private sector or a lot that is being done in the private sector that ought to be done in the Government sector?

Mr. DUNCAN. It depends on the swings over time. Let me just trace the history of it as I see it. Back in the period following World War II we had an explicit Government policy to rely more and more on trade associations to generate basic inputs to Government statistics. Stuart Rice, who was the head of the statistical system at that time had a policy that Government should not duplicate statistical activity that existed in the private sector.

During the 1960's the pendulum swung the other way. It reached the extreme in 1974 following the oil shock, when Congress passed laws which said the public doesn't trust the American Gas Association to estimate gas reserves. We want to do it in the Government. So how does the Government do it? Government goes back and asks the members of the American Gas Association "what is the level of reserves?" Government got the same estimate. The only way they could get different estimates was to have geologists go out and reestimate the reserves, but that just wasn't feasible.

My point is, we reached a point of distrust of private sector statistics back in 1973, 1974, or 1975. Now what is happening is that the pendulum is swinging back a little bit more to rely more and more on the private sector. I don't think there is a magical line that tells us what is the right amount and what is not the right amount.

What worries me is that we are passing over the line where the credibility and conceptual soundness of Government statistics are acceptable, and there is no way to replace that in the private sector. It worries me that our basic economic framework, the economic statistics framework, is deteriorating. That is the concern I would bring to this committee today.

Senator SARBANES. Yes. Well, that concern has prompted this committee to hold these hearings and to commission the study which Ms. Slater has done.

You have been a very helpful panel and we appreciate your effort and time very much.

We will stand adjourned.

[Whereupon, at 12:45 p.m., the committee adjourned, subject to the call of the Chair.]

THE QUALITY OF THE NATION'S ECONOMIC STATISTICS

THURSDAY, APRIL 17, 1986

Congress of the United States,
Joint Economic Committee,
Washington, DC.

The committee met, pursuant to notice, at 10:05 a.m., in room SD-342, Dirksen Senate Office Building, Hon. Paul S. Sarbanes (member of the committee) presiding.

Present: Senators Sarbanes, Mattingly, and D'Amato; and Representative Scheuer.

OPENING STATEMENT OF SENATOR SARBANES, PRESIDING

Senator Sarbanes. The committee will come to order.

Today the Joint Economic Committee holds the second of two hearings on the quality and accuracy of our economic statistics. The hearings are a response to the widespread and growing concern that our capacity to provide the statistical information on which sound judgment depends, in both the private and public sectors, is increasingly at risk, and is being placed further at risk by stringent budget reductions.

At the first meeting last month, the committee examined in some detail the issues raised in the study prepared for the Joint Economic Committee by Courtenay Slater, "Opportunities for Improving Our Economic Statistics." Among the major points that emerged from that hearing were:

First, over the last decade the workload faced by the statistical system has risen dramatically. For example, a 20-percent increase in the labor force and a 90-percent rise in imports. Spending on statistics, under the broadest definition, is only a miniscule part of the Federal budget, and therefore what is very minor savings in terms of the Federal budget can often have a crippling effect on the vital statistical programs we already have, and may make it impossible to develop the new programs we need to keep pace with our rapidly changing economy.

Second, with the rapid growth in trade volume, data on imports and exports have become more important, but they are less accurate and less timely. The Customs Service uses manual processing of all import data, which is computerized only after it is received by the Census Bureau. Customs has been overwhelmed as the volume of imports has grown rapidly and serious data backlogs have arisen. The monthly data on our trade balance receive a great deal of attention, but they have become so unreliable that the

Census Bureau has ceased seasonal adjustment. Export data are also weak, with serious underreporting of exports to Canada, our largest trading partner.

Unfortunately, all of these problems then feed into the GNP data.

Third, the Bureau of Economic Analysis recently revised GNP data to take into account estimates of the underground economy and the decline in computer prices. But the GNP data are based largely on sources outside BEA's control. Thus it is vulnerable to budget cutbacks and program changes at other agencies, which may feel little, if any, responsibility to collect data for BEA. In some cases, they may not even be aware of BEA's reliance on the information.

Concerns about the accuracy and adequacy of our statistics which have been expressed with increasing frequency over the past year in a range of national publications were not allayed at the March 17 hearing. On the contrary, they were underscored by Ms. Slater's study and by the testimony received from the committee's expert witnesses. As a consequence, public attention continues to be focused on this highly complex and somewhat abstruse but very important issue.

Let me cite just one example. Writing in the April issue of Fortune magazine, Irwin Ross concludes, quoting from the Slater study, "The basic trouble is that the world has changed and statistics have not all kept up."

Mr. Ross' article will be included in its entirety in the hearing record, but I believe it is worth citing here.

The article says, in part:

> The consumer price index is out of date—a matter of moment not just to economists and statisticians. Some 37 million recipients of Social Security have their payments adjusted annually by the CPI, as do military and federal civil service retirees. Some 200 million food stamp recipients see their allotments shift with the CPI. A rise of a single point in the index means a $4.6 billion increase in the federal deficit, according to the Office of Management and Budget.
>
> By all accounts, the index of leading indicators is in especially bad shape. Produced monthly by the Bureau of Economic Analysis, it combines 12 series that are supposed to herald up or down movements in the economy. The index does so only on occasion and with such variable lead times as to be of little value. The main problem is that it has not been revised since 1975.

[The article referred to for the record by Senator Sarbanes follows:]

THE ECONOMY

ECONOMIC STATISTICS:

Those government-issued numbers on which so many business judgments, plans, and forecasts depend are often seriously defective. Blame bureaucratic inertia as well as budget cuts. ■ *by Irwin Ross*

The consumer price index *begins with the painstaking price-shopping of around 400 field*

TO ANYONE who believes economic statistics, the announcement from the U.S. Bureau of the Census last September was a bit of a shocker: its monthly figures on imports were way off. The snafu developed because the Customs Service, which collects the raw data, could not get all its paper to the Census Bureau on time. It was still operating a cumbersome manual system of data collection. As a result, each month's totals included imports from prior months. Delayed reports for August, say, swelled the import figures for September and October. Over a period of two years, anybody trying to track trade performance on a monthly or even quarterly basis was badly misled.

Among the deluded was the Commerce Department's Bureau of Economic Analysis, whose initial reports on GNP growth were far too high for the last quarter of 1984 and far too low for the first quarter of 1985, largely because an enormous volume of December imports was erroneously credited to January. After the bureau made the adjustment, GNP growth in the fourth quarter shrank from 4.3% to 0.6%, while growth in the first quarter of 1985 swelled from 0.3% to 3.7%. People at the Bureau of Economic Analysis must have been relieved to learn that at last the Customs Service is acquiring an automated system to process information on imports.

That little horror story is perhaps the most dramatic example of the eroding reliability of U.S. economic statistics. The subject is finally getting some national attention, in part because of the Census Bureau's candor in confessing its goof. In March the Joint Economic Committee of Congress held a widely publicized hearing on the problem.

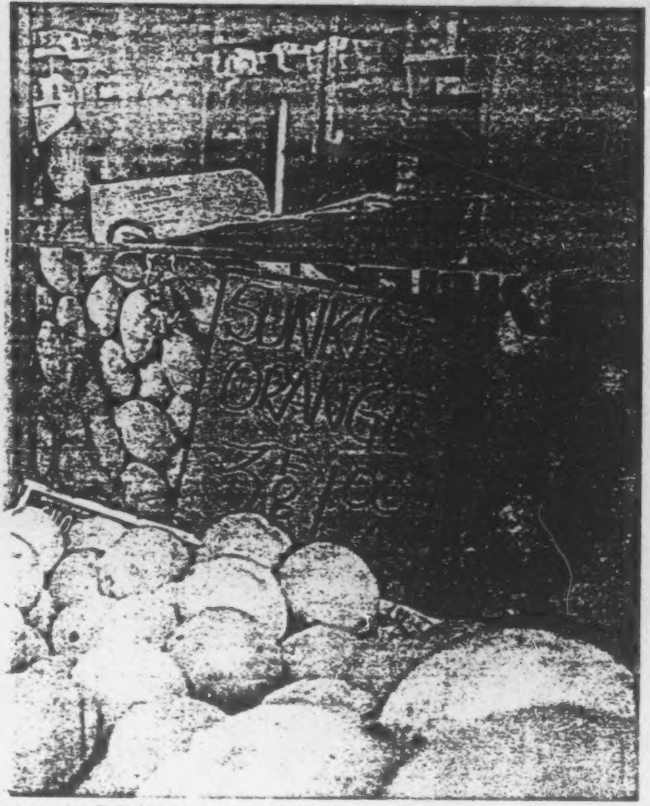
The basic trouble is that the world has changed and statistics have not all kept up. "Too many statistical series are outmoded, and there are too many data gaps," says Courtenay Slater, former chief economist of the Commerce Department, in a report prepared for the Joint Economic Committee. "Information about new industries and rapidly growing economic sectors is often scanty and sometimes misleading."

To a considerable extent, the statistical lags result from budgetary constraints. Cutting began in the Carter Administration and went deeper under Reagan. The Gramm-Rudman-Hollings act is forcing an across-the-board 4.3% cut on all agencies. Some deficiencies, however, such as the failure of price indexes to deal adequately with changes in quality, long antedated the financial pinch.

In any account of obsolescent statistical

RESEARCH ASSOCIATE *Lorraine Carson*

WHY THEY OFTEN LIE



representatives. Phyllis Byer checks 18 or so outlets a week in New York City.

systems, that vast compendium known as the Standard Industrial Classification (SIC) must head the list. A compilation of 1,005 numerical industry codes, the widely used SIC was designed to classify business establishments by their economic activity, thereby facilitating the collection, tabulation, and analysis of all sorts of data. Obviously any classification system has to be reasonably current to be of value, but the last major revision of the SIC code was published in 1972. A revision was to have been undertaken in 1982, but the Administration declined to put up the money.

The present SIC manual is in many ways only of antiquarian interest. It has a separate code number for "extraction of pine gum" but not for manufacture of computers. At long last the Administration has decided to undertake a revision. Proposed changes were published in the *Federal Register* for comment. A total of 78 industries are to be eliminated as stand-alone categories with their own code numbers, and 79 new industries are to be recognized as distinct for the first time. Out as stand-alones are "rock salt," "artificial flowers," and "billiard and pool establishments." In are "travel agencies," "videotape rentals," and "animal aquaculture" (mostly fish farming). "Management, consulting, and public relations" will be divided into four separate industries and "engineering, architectural, and surveying services" into three. If all goes well, the new manual will be out next year, 15 years after the old one.

The consumer price index is also out of date—a matter of moment not just to economists and statisticians. Some 37 million recipients of Social Security have their payments adjusted annually by the CPI, as do military and federal civil service retirees. Some 20 million food stamp recipients see their allotments shift with the CPI. A rise of a single point in the index means a $4.6-billion increase in the federal deficit, according to the Office of Management and Budget.

As newspaper readers are reminded every month when the new CPI number comes out, the index is based on a "market basket" of the goods and services purchased by a typical urban dweller—a basket that was first put together in 1972-73. Here we are 13 years later with the same shopping list and the same weighted averages, even though that typical urban consumer is likely to have changed his spending habits considerably. For one thing, stores now offer a host of new electronic wares to spend money on. New consumer products not in the CPI include videocassette recorders, personal computers, and compact-disk players. Since the index does not reflect the decline in per capita energy use since 1973, it gives too much weight to energy prices. Retreats in prices of gasoline and fuel oil largely accounted for the CPI's 0.4% dip in February, the first downtick since December 1982.

The Bureau of Labor Statistics freely admits that the 1972-73 market basket is out of date. Indeed, the bureau has been engaged in a five-year project to design a new basket to reflect consumption patterns in 1982-84. The job required a comprehensive household survey of consumer expenditures to discover

PHOTOGRAPHS: ANGEL FRANCO—VISION PHOTOS

what people were spending their money on. The revised CPI will be out in February 1987.

The other major drawback in the CPI is that changes in quality largely elude it, a problem as old as the index. If the quality of a product improves as its price rises, the true rise is obviously less than the nominal rise. It is generally agreed that the BLS does an excellent job of adjusting for quality in automobiles through a complex process of pricing components; the auto companies cooperate by furnishing a lot of data. But with other consumer durables, the same painstaking analysis is only infrequently applied—for reasons of methodological difficulty as well as cost. For services, the BLS makes only scattered efforts to assess quality. How would the BLS go about tracking quality in dry cleaning, for example? Obviously by close scrutiny over a period of time in many places. That would be fearfully expensive.

THE PRODUCER PRICE index (PPI), which these days gets a lot of attention as an indicator of ebbing inflation, has a major deficiency of its own, apart from the fact that it also reflects 1972 weights. The index covers only commodities, yet the service sector, including trade, communications, transportation, and finance, accounts for almost half of GNP and more than 70% of business employment.

The BLS has long been aware of the slighting of services, and in 1984 Congress appropriated $750,000 as seed money toward adding coverage of services in various statistical series, including the PPI. Since then the BLS has received a trickle of additional funds, totaling $2.3 million. The money is largely for research on how to do it rather than for doing it. Incorporating the service sector into the PPI would probably cost as much as the present index—$14 million a year, according to Kenneth Dalton, associate commissioner of labor statistics in charge of price indexes. In the present budgetary atmosphere, nobody is proposing that.

The employment statistics do not suffer from underfunding, but they are far from problem free. They often give off confusing signals. Over the past four years, and particularly since mid-1984, the two BLS measurements of employment—the household survey and the business establishment survey—have been seriously out of sync. The establishment survey estimates the number of payroll jobs through a questionnaire sent to a sample of 260,000 companies. At the same time, interviewers question a sample of 60,000 households to determine how many members are working or have actively sought work in the preceding four weeks.

The establishment survey picks up only wage and salary workers and thus is expected to report a lower figure than the household survey, which includes the self-employed, farm workers, and domestics. When these groups are deducted, the household total should logically show about the same number of payroll jobs as the establishment total. Yet it does not. Adjusted household employment is substantially lower, and the gap is widening. In November 1982 households reported 3,142,000 fewer wage and salary jobs than establishments did. By January 1986 the gap had widened to 4,230,000, a 35% increase. BLS experts speculate that a household member who is reported as employed may actually hold two jobs and that the number of moonlighters has been increasing. But there is no question on the interview sheet that would elicit information about dual jobholders. Perhaps a question or two should be added.

Import figures *are compiled from customs data at this Census Bureau center in Indiana.*

By all accounts, the index of leading indicators is in especially bad shape. Produced monthly by the Bureau of Economic Analysis, it combines 12 series—among them new orders, net business formation, and building permits—that are supposed to herald up or down movements in the economy. The index does so only on occasion and with such variable lead times as to be of little value. The main problem, according to Feliks Tamm, the official who gets out the index, is that it has not been revised since 1975. "There is hardly one series that we are completely satisfied with," he says.

Improvements do occur in the statistics the government puts out, but slowly. Late last year the Bureau of Economic Analysis introduced an index for computer prices. In the past it had no method for evaluating quality changes, so it simply held prices constant to compensate for improvements. When the bureau finally developed a sophisticated index, it discovered that with computing power taken into account, computer prices had dropped at a rate of 18% a year between 1972 and 1984. This revelation had a pronounced effect on the widely followed price index for producers' durable goods, reducing its rate of increase over that period from 6.9% to a mere 1.8%.

A widely welcomed change was the recent demise of the "flash" estimate of the current quarter's GNP. Released in the final month of the quarter, the flash was partly based on projections from the first month's data and partly on the second. It was almost always grievously off the mark, but not predictably in one direction or the other. The Bureau of Economic Analysis began publishing the flash in 1983; before that it had been furnished to other government economists and had invariably leaked. Last January the Commerce Department mercifully killed it. But that solution can hardly be invoked for most of our statistical problems. ◼

Senator **Sarbanes**. We look forward to hearing from our witnesses today on the many broad and specific questions which continue to be raised about the adequacy of our statistical base, about its role in private and public sector decisionmaking, about its ability to keep pace with our rapidly changing economy and about the effects of budget reductions on our statistics-gathering capacity. It should be noted that full and reliable statistical information does not, in itself, constitute or dictate sound policy; there is no substitute for sound judgment in making sound policy in either the public or private sector. At the same time, however, the quality and availability of our statistical data are a vital factor in making sound decisions. Good statistics are no guarantee of good policies, but they are an essential part of the framework of decisionmaking that makes development of good policies more likely.

In this connection, it is worth noting that the Japanese attach great importance to their national statistics programs. While statistics gathering in Japan is a relatively recent development—by contrast, the first U.S. census was taken nearly 200 years ago—Japan today has a national statistics law and a month-long national celebration of statistics, of which the theme last year was, and I quote, "Statistics are the beacon of our happy life."

With these thoughts and questions in mind, we look forward to hearing from today's witnesses.

Our first witness will be Ms. Wendy Gramm, Administrator of the Office of Information and Regulatory Affairs at the Office of Management and Budget. In this capacity, Ms. Gramm has responsibility for overseeing Federal statistical programs.

Following Ms. Gramm's testimony, we will hear from a panel of four experts:

Mr. James Bonnen of Michigan State University, formerly chairman of the Reorganization Project for the Federal Statistical System.

Mr. Sidney Jones, member of the associate faculty of the Center for Public Policy Education at Brookings. He was, from 1983 to 1985, Under Secretary of Commerce for Economic Affairs.

Mr. Thomas Juster, director of the Institute for Social Research at the University of Michigan and chairman of the Committee on Statistics of the American Economic Association.

And Ms. Martha Farnsworth Riche, editor of American Demographics magazine.

Ms. Gramm, we welcome you to the committee, and look forward to hearing your testimony this morning.

I will defer to my colleagues if they have a statement.

Senator Mattingly.

Senator **Mattingly**. I don't have a statement at this time.

Senator **Sarbanes**. Congressman Scheuer.

Representative **Scheuer**. No statement. Thank you, Senator.

Senator **Sarbanes**. Ms. Gramm, you may proceed. Your entire prepared statement may be included in the committee record, and I will assume you will want to summarize its high points.

STATEMENT OF WENDY L. GRAMM, ADMINISTRATOR, OFFICE OF INFORMATION AND REGULATORY AFFAIRS, OFFICE OF MANAGEMENT AND BUDGET, ACCOMPANIED BY DOROTHY TELLA, CHIEF, STATISTICAL POLICY OFFICE

Ms. **Gramm**. I want first to thank you for the opportunity to come here and testify on this important subject.

I would like to summarize the high points of my prepared statement, but also to walk through it, because you have raised a number of important questions my testimony addresses.

I think I wouldn't mind having a month-long celebration of the importance of statistics.

The Federal Government will be spending around $1.5 billion on statistical activities this year.

Obviously, I agree with you that the quality and usefulness of our statistics are important to us, not only to tell us about the condition of our economy but also to tell us about the performance of the programs undertaken by our Government. Therefore, it is essential that the quality of the data we produce be of the highest possible quality. By "quality," I mean not just accuracy, but timeliness and closeness with which statistics match the economic concepts we are trying to measure.

That is not always an easy task. Statistics are not facts, but estimates that are subject to many different kinds of error. I would point out that many of you will be doing financial disclosure reports. One seemingly simple question is, What is the value of your house back in your district? That is not an easy question to answer. There isn't an absolute correct number that is waiting there to be discovered. All of our statistics are very much like that. They involve estimates. There aren't perfect numbers out there that we have only to uncover.

We must provide statistics as accurate as possible. However, there are often tradeoffs between accuracy and timeliness. Also, in this changing economy, the uses to which the data will be put, as well as the demands for different kinds of data are always changing. Our statistical system must adapt to the changing demands for such data. An example is our increasing demand for timely trade data. Foreign trade is something that has been more important to us in the last few years. We want our system to adapt to changing conditions, but we also want to be able to compare statistical measurements from one period to the next. We want to be able to maintain the continuity of our statistical data. Otherwise we wouldn't be able to tell, for example, if the GNP is really higher or lower this year than last. Furthermore, in the United States, we rely heavily on voluntary cooperation of respondents to obtain statistical data. Our experience has been that we get better quality statistics when we rely on such voluntary cooperation. Statistical agencies must devote considerable time and effort to ensuring that they get this cooperation.

What I have been saying is that quality in statistics is very difficult to define. It encompassed survey, timeliness, continuity, and reliance. Quality is something that our Statistical Policy Office has been concerned about. Until recently, not very much had been done by way of evaluating systematically the quality of our statistics. Last September, however, OMB issued a statistical policy directive, directive No. 3, which requires the agencies that produce principal economic indicators to evaluate the performance of each indicator every 3 years. The evaluation process is starting now. In the next few months we will have the first evaluations coming from the agencies to OMB for review. I'd be happy to include a copy of directive 3 for the record.

Some questions have been raised about the quality of certain statistical data, for example, the preliminary GNP statistics and the Census Bureau's monthly merchandise trade data. Questions have also been raised about the coverage of service activity in the U.S. economy.

I don't think these are just issues of quality. There are also difficult conceptual and timing issues. I do agree, however, that we need to work to be sure that we get the best data possible in these and all other areas.

With respect to the preliminary GNP estimates, we have a situation where there is a tradeoff between accuracy in the statistics and timeliness. The Bureau of Economic Analysis publishes its preliminary GNP estimate very soon after the end of the quarter, based on very incomplete input data. That is a very difficult task and they continually work to make the best estimate possible. The Commerce Department discountinued its Flash GNP estimate because of the great difficulty in issuing on even earlier estimate that was accurate enough, in their view, to be useful. We agreed with the Commerce Department's decision to discontinue it.

The Bureau of Census faces an equally difficult problem in producing accurate, timely, monthly estimates of foreign trade. This has always been a difficult problem and is a problem for most countries. One of the reasons why there has been so much attention paid to this recently is that we have become very interested in our trade data in the last few years. The agencies involved are working to improve the reporting of these data, but again, we are talking about data that are published on a monthly basis, and it is simply a difficult administrative problem to compile and publish those data quickly. To address the problem, the Customs Service is expanding its automated broker interface, using computers to facilitate the filing of data. That has been in operation for over 2 years and more brokers are participating in the system. I understand also that next month, the Customs Office in New Orleans will be sending their whole data tape directly to Census. The use of such innovative techniques should help with this problem.

The Bureau of the Census has developed a revised statistical monthly report to help alleviate the problem. And both agencies, that is, Customs and Census, are working together to try and reduce the amount of time that it takes for verification of the data that come from Customs to Census. As you can see, the agencies are working on this problem and the quality of the data constantly improves.

I discuss this issue in my prepared statement. But what you have here in the case of foreign trade data are data that we want to use for economic policy purposes that are being collected for administrative purposes. Often data that are collected for administrative purposes are not in the form that we would most like for economic analyses and that creates a problem, but it is something that is being worked on.

Representative **Scheuer**. Ms. Gramm, would you lower the mike, so that you speak directly into it? I am having a little trouble hearing.

Ms. **Gramm**. Thank you.

Senator **Sarbanes**. Ms. Gramm, Senator D'Amato has come in. Since there has been this break in your testimony, I will defer to him for a moment.

Senator **D'Amato**. Senator, thank you very, very much. I have an ongoing committee meeting, but I would like to insert a statement that I have prepared and put it in its entirety and commend the Senator for holding the hearing today.

Ms. Gramm, I am certainly going to be looking forward to reviewing your testimony.

[The written opening statement of Senator D'Amato follows:]

WRITTEN OPENING STATEMENT OF SENATOR D'AMATO

MR. CHAIRMAN, I COMMEND YOU FOR HOLDING THIS HEARING TODAY ON GROWING THREATS TO THE QUALITY AND ACCURACY OF U.S. GOVERNMENT STATISTICS. MY CONCERN FOR OUR ABILITY TO MAINTAIN UP-TO-DATE STATISTICAL DATA IS HEIGHTENED BY THE FAST-PACED CHANGES OCCURING IN OUR ECONOMY AND SOCIETY. IT IS IMPERATIVE THAT OUR NATIONAL DECISIONMAKERS ARE PROVIDED THE MOST ACCURATE INFORMATION AVAILABLE TO SHAPE POLICY.

THE UNITED STATES HAS A DECENTRALIZED SYSTEM FOR GATHERING STATISTICAL INFORMATION. JUST A FEW OF THE AGENCIES RESPONSIBLE FOR THE COLLECTION OF ECONOMIC AND SOCIAL STATISITICS INCLUDE: THE CENSUS BUREAU, THE BUREAU OF LABOR STATISTICS, THE ENERGY INFORMATION AGENCY, THE BUREAU OF ECONOMIC ANALYSIS, THE STATISTICAL REPORTING SERVICE, THE NATIONAL CENTER FOR HEALTH STATISTICS, AND THE CENTER FOR EDUCATION STATISTICS. FEDERAL STATISTICAL COLLECTION AGENCIES HAVE A BUDGET OF $1.5 BILLION; IN ADDITION, MORE THAN 70 AGENCIES SPEND $500,000 EACH ON THEIR OWN COLLECTION OF INFORMATION.

THE IMPORTANCE OF THESE DATA COLLECTION AGENCIES CANNOT BE OVERSTATED. ECONOMIC STATISTICS - RANGING FROM THE GNP TO MONTHLY EMPLOYMENT FIGURES TO TRADE BALANCES - ARE ESSENTIAL TO THE AMERICAN BUSINESS COMMUNITY. EDUCATION DATA - TRENDS IN DEMOGRAPHICS - ARE CRUCIAL TO OUR UNIVERSITIES PLANNING FOR THEIR FUTURE. DUE TO THE SENSITIVITY AND CONFIDENTIALITY OF COLLECTING THIS INFORMATION, IT IS IMPERATIVE FOR THE FEDERAL GOVERNMENT TO CONTINUE AS THE PRIMARY COLLECTOR AND RESEARCHER OF THIS INFORMATION. AS THE CONGRESS CONTINUES TO GRAPPLE WITH BUDGET DEFICITS, TRADE DEFICITS, AND THE ECONOMY, APPROPRIATE AND RELIABLE RESEARCH DATA MUST BE READILY AVAILABLE.

I LOOK FORWARD TO HEARING FROM OUR DISTINGUISHED PANEL OF WITNESSES ON HOW WE CAN BEST CONTINUE TO COLLECT STATISTICAL DATA.

THANK YOU, MR. CHAIRMAN.

Senator **Sarbanes**. Please continue.

Ms. **Gramm**. A third issue that I note in my prepared statement is that our statistics do not provide as detailed and complete coverage of the service economy of the goods producing economy.

Some economists suggest that the growth in our GNP is understated and our balance of payments problems are overstated because the activity in the service industry has not been measured adequately. While we agree that this problem is a real one, the solutions are not necessarily just to put more money into particular statistical programs. Measuring service industry output and productivity is a conceptually difficult task, and we need such measures in order to know what data to collect and how to interpret them.

There are efforts underway now to solve these problems. The Bureau of Labor Statistics, for example, is working on some of the definitional issues. The Bureau of the Census for the past few years has been expanding the amount of information it collects on service industries. OMB is revising the standard industrial classification [SIC], with the revised SIC to go into effect next January. It will include expanded coverage of the service sector. BEA is also preparing a survey to collect more information on international service transactions.

On balance, I don't think that the quality of our economic data is either declining or threatened. On the other hand, I think that we should always be mindful of the fact that we want all our statistics to be as accurate, timely, and useful as possible to users—both government users, including you in Congress, as well as the private users. So regular evaluation and hearings like this one are very valuable, they focus our attention on what we are doing and determine whether or not there are other problems that need special attention.

I would like to address some broader issues that we are interested in, areas where we think that proper attention by statistical agencies could help to improve the quality of the data the Government collects.

I will discuss OMB's role a little bit more later on. But let me anticipate a little bit and point out what OMB does. We have general statistical policy responsibilities. We do not micromanage all the different agencies and how they collect their data, but rather provide guidance to them on issues that affect the quality of their data. What I will be talking about in the next few minutes will not necessary be program by program, but rather broad issues that cut across statistical surveys and affect the quality of the data from them.

First, of all, many economic surveys suffer from what we call coverage problems, that is, the data collection fails to cover the whole target population. What that means is, that the information you get may not be representative of the population that you are trying to collect information about. The coverage problem arises from weaknesses in methods currently used by some agencies to develop sampling frames. And it makes it even more difficult to collect service industry statistics. When you don't aggressively go out to make sure that you are getting full coverage of your target population, you tend to miss—not get information on—small businesses or those businesses that are not in the traditional form of establishment, where their addresses might already be on the existing lists.

So the growing parts of our economy can be very much undercounted by this lack of coverage.

To work on and help solve this problem, the Federal Committee on Statistical Methodology, which OMB chairs, recently began a study of the major causes of coverage errors. The study will draw on the experiences of the entire Federal statistical community to analyze specific problems, and where possible, to recommend solutions.

Another area where the Government needs to do a better job is in eliciting respondent cooperation in statistical surveys. OMB has undertaken a study of the methods and practices of seven Federal agencies use in conducting surveys of farm and nonfarm businesses. This study covers over 500 different surveys, and among our preliminary findings is that agencies tend to get better respondent rates using probability sampling. The OMB study also indicates that voluntary statistical programs, seem to produce more usable responses than most mandatory programs. The use of coercive authority extracts a price in terms of timeliness of responses.

A third problem rises from the fact that, in producing economic statistics, the Federal Government depends heavily on access by statistical agencies to administrative records and reports.

As I stated before, sometimes the information that we collect for administrative purposes is not the most useful for constructing statistical estimates of the economic concepts we hope to measure. The role of statistical agencies as secondary users of administrative records creates problems. The data are not exactly right for their use, but, from the users' point of view, the data are almost free goods. Statistical agencies generally don't have to pay for the data, so there is an incentive for them to rely on those data, even if they are not the most suitable for their purposes.

In addition, in recent years, some of the administrative reporting systems have disapproved. Those that supported regulatory programs in energy and transportation for example, have not needed to collect so much administrative data as before. The Energy Information Administration, I think, provides a very good example. It has cut a number of surveys and information collections that, because of deregulation, are no longer needed. There is no longer any need for information on mandatory allocation, for example.

Now there has been some concern that with the disappearance of such data collections, we have less statistical information for our policymakers in the energy area, but I would submit that this need not be the case. I think EIA is a very good case in point. Even with budget cuts, EIA took a very hard look at what data were needed once the industry was deregulated—at what data would be useful for policymakers for other purposes. The agency restructured its surveys and is now providing very high quality information on a substantially smaller budget.

The question has been raised about statistical budgets between 1980 and 1987. I have in my prepared statement a chart that shows that, in contrast to outlays for other relatively controllable nondefense programs, spending for economic statistics has increased over the period. Each year, OMB's Statistical Policy Office puts out a report called "Federal Statistics, A Special Report on the Statistical Activities of the United States Government." The report contains information, agency by agency, on current dollar obligations as well as estimates in constant dollars.

I have also a table that shows both current and constant dollar budgets for four of the major statistical agencies.

The agencies in my table are BLS, the Census Bureau, SRS, and BEA. These ~~are~~ agencies that produce most of the statistics used for current economic analysis and forecasting. Most of our 46 principal economic indicators, for example, are produced by these agencies.

Our statistical report contains information on other statistical agencies. There are some whose budgets have declined somewhat. EIA is one agency whose budget tends to dominate the group totals from which other people have drawn the conclusion that statistical budgets have been declining. As we discussed earlier, EIA's budget has declined because there is no longer a need to collect certain data now that the energy industry has been deregulated.

What the data show is, that for the major statistical agencies, budgets have not suffered as one might have thought based on data other people have compiled.

What are the differences between our figures and those that some others have compiled?

First of all, we generally do not categorize EIA as an agency producing general economic statistics. I should point out that we included EIA in the chart shown in my prepared statement, and you see that even with EIA included, obligations in current dollars have increased. However, if you included EIA, constant dollar total would decline from 1980 to 1985.

Second, we use obligations rather than budget authority.

Third, the deflator that we use is not the GNP deflator, but rather the deflator for Federal programs. We're talking about Federal programs, and so, as a deflator, we use a price index that is related to what the Federal Government spends on pay and purchases of goods and services.

So I think those three things together make a difference.

There are some agencies whose budgets have declined, but on balance——

Senator SARBANES. What are the modifications you just indicated you are using in presenting the figures in your statement?

Ms. GRAMM. Fir~~st of all~~, the number we use is not budget authority, but obligations, which we believe is a more accurate estimate of the amount of money that is in a program. That is one difference. Second, when we look at constant dollar figures, we deflate, not by the GNP deflator, but by the price deflators for Federal civilian purchases and Federal civilian pay. This is what OMB uses.

Senator SARBANES. Where in the statement is the explanation of the deflator that you use—

Ms. GRAMM. It is in footnote 2, if you have my double-spaced prepared statement.

Senator SARBANES. I have the prepared statement that you submitted this morning, the one that is 19 pages long.

Ms. GRAMM. That's in the footnote, footnote 2.

Senator SARBANES. All right. Thank you.

Ms. GRAMM. Due largely to the sequestering of funds mandated by Gramm-Rudman-Hollings, the four agencies in our table have constant dollar decreases from 1985 to 1986. However, the President's Budget for 1987, which meets the Gramm-Rudman-Hollings target, would give all four constant dollar increases over 1986. So, in fact, the across-the-board sequestration, again, by nature of its being across-the-board, did affect these agencies and affected them more than they would have been affected otherwise.

I would like to point out that a decline in the amount of money spent by a statistical agency doesn't necessarily mean that the quality of the statistics it produces is being diminished. I mentioned EIA. There is also SRS, in the Department of Agriculture. Funding for SRS is six-tenths of 1 percent lower in 1987 than in 1982 in constant dollars. And while this reduction is small, it does provide an opportunity to look at the relationship between budget and quality of economic statistics.

Between 1982 and 1985, this agency showed what could be done by reexamining its traditional methods of collecting data. It established new high-quality programs and eliminated some marginal programs, improving on the overall quality of its data. I mention that the Energy Information Administration's budget will have declined by roughly a half between 1980 and 1987, but in fact, it continues to produce high-quality statistics. We have also calculated the change from 1980 to 1987 in funding for a category of programs that would produce what we call current general economic statistics. This category excludes agriculture statistics. It includes all the programs of BLS, the Census Bureau's current programs, BEA, the Statistics of Income Division of the IRS, and the statistical activities of HUD, the Customs Service and the Federal Home Loan Bank Board.

After taking out of the BLS budget the transfer of the trust funds from the Employment and Training Administration to BLS in this period, the budget for this category will have increased by 2 percent in real terms between 1980 and 1987.

Well, one can continue to go through all the different combinations of agencies, but I think if you look at the data that we will be providing very shortly in our annual report on statistical programs, you can go through agency by agency and program by program, and you will find that on balance, the budgets have not been cut as dramatically as is widely believed.

Now I would like to spend a little bit of time talking about the role of OMB in oversight of Federal statistical activities. We have had this function since 1939, except for a period between 1977 and 1981, when the function was assigned by Executive order to the Department of Commerce. Under the Paperwork Reduction Act of 1980, we have responsibility for statistical policy and coordination, including standard-setting and statistical programs. Prior to that act, our function was carried out under the Budget and Accounting Procedures Act of 1950, which directs the President to develop programs and prescribe regulations to improve the compilation, analysis, publication, and dissemination of statistical information by Federal agencies.

Our objective is to assure that the statistics that are compiled and published by the Federal agencies are as useful as possible, that statistical work is done as efficiently as possible, and that people who provide information to the Federal Government for statistical use are treated fairly.

Making sure that the results of the statistical surveys are as useful as possible, requires that we plan them with a clear vision of what their use will be. We have to make sure that the data are sufficiently accurate and timely, and finally, that the documentation of the procedures and the results are complete and available to users. Documentation is very important, because it is the only way that we have to evaluate and for users to evaluate what the data really mean, where they come from, and how the estimates were obtained. I have heard many a story of a student working on a dissertation who have reestimated an estimating equation, thinking he had discovered a new economic concept. In fact, all he had discovered was the estimation procedure used in developing the indices in the first place.

So the documentation of those data is very important.

We have a decentralized system in the United States. A lot of other countries have statistical functions centralized in one agency. We, very frankly, think that decentralization has a lot of advantages and our policy is to strengthen and preserve the system we have. We have some 70 separate agencies that have statistical activities of $500,000 a year or more, and we believe that because they are decentralized, it gives us the widest possible opportunities for innovation, for technological advancement, for new methodologies to be tried out on a small scale and, if successful, adopted by other agencies.

We have a lot of examples of agencies learning from each others' experiences. As part of the coordination role that OMB plays we have an important job in making sure that the innovations made by one agency do get transferred to other agencies.

We undertake this coordination role through a number of different processes. We help with technology transfer, for example, through our statistical policy directives. We are working on a statistical policy circular right now, providing guidance on practices which we think will improve the quality of statistics. We also coordinate statistical programs through our paperwork clearances, through out budget review, and through our legislative reference review. In fact, we get all of OMB involved in helping us carry out our statistical policy functions. We also are involved in a number of working groups, including an Economic Policy Council Working Group on the Quality of Economic Statistics. We believe that we have been quite successful in carrying out our policy and coordination function and we will continue to work hard to carry them out effectively.

At this point, I would like to stop and let you ask me other questions that you might have.

I do appreciate the chance to come here and tell you some of my views about statistics in the Federal Government and the quality of these statistics.

[The prepared statement of Ms. Gramm follows:]

PREPARED STATEMENT OF WENDY L. GRAMM

Mr. Chairman and members of the Joint Economic Committee: I appreciate the opportunity to appear here to discuss the Federal statistical system, the quality of the economic statistics the Federal government produces and uses, and the role of the Office of Management and Budget.

The United States Government will spend over $1.5 billion this year on the compilation, analysis, and publication of statistics.

Statistical data published by Federal agencies are critical to our understanding of the health and welfare of our population, the condition of our economy, the state of our natural resources, the quality of our environment, and the performance of our public and private institutions. Moreover, the Federal government bases its own policies and programs on these data, and uses these data in making choices that can cost or save billions of dollars a year and profoundly affect people's lives and well being. It is essential that such data be of the highest possible quality.

Producing timely, accurate, and useful statistics is a difficult job. Statistics are not numerical facts, waiting to be uncovered by a diligent factfinder. They are estimates that are subject to many kinds of error, even when they are produced by the most capable professionals using the best available methods. Producers of statistics, moreover, face constantly changing demands -- the things the government and the public want statistics to measure change over time. Statisticians and statistical agencies must continually develop new definitions and methods to meet new demands. At the same time, they are called upon to maintain the continuity of basic measures over time. Furthermore, in the United States, the government can produce timely, accurate statistics only if it has the voluntary cooperation of the individuals and businesses who are asked to supply information about themselves to government agencies. Statistical agencies must devote considerable effort and resources to developing and maintaining that cooperation.

The Quality of Economic Statistics

Quality in statistics is difficult to define, let alone measure. In the case of data used to assess and forecast economic conditions, "quality" represents a combination of timeliness, accuracy, conceptual integrity -- ensuring that the statistical measures match the concepts used in analytical models -- and documentation that enables users to interpret the data and use it correctly. In many cases, tradeoffs exist between accuracy and timeliness. In some cases, tradeoffs must also be made between the accuracy and timeliness of data and the quality of documentation, since documentation requires an investment of statistical agency resources. Different users of statistics may have quite different views on where such tradeoffs should be made. Thus, there is no simple, clear yardstick by which the quality of our current economic statistics can be judged.

In earlier testimony before this committee, concerns were raised that the quality of economic statistics may be declining. I do not believe we have evidence that quality is declining. However, the Federal government must constantly assess the usefulness and accuracy of the estimates it produces.

Until recently, there has not been any requirement or process for evaluating government economic statistics on a regular basis, and we have not known as much about their quality as we should. Last September, OMB issued a directive on the compilation, release, and evaluation of principal Federal economic indicators that contains a new requirement for evaluation of all such indicators every three years.[1] The agencies that produce the estimates will do the evaluations, following OMB guidance, and submit them to OMB for review. Working with the Council of Economic Advisers and the statistical agencies, we have established the schedule for the first 3-year cycle of evaluations in 1986-88. The report on the first evaluation will be submitted to OMB next month. As the evaluations proceed, we believe they will give us, for the first time, comprehensive information about the quality of our key economic statistics.

Some recent newspaper articles have either alleged or implied that inaccuracies in particular estimates or deficiencies in the coverage of particular data series are examples of a general deterioration in the quality of government economic statistics. The examples have included the sizable revisions in the preliminary GNP estimates, inaccuracies in the Census Bureau's monthly merchandise trade data, and the less complete coverage of service activity in the U.S. economy than of goods-producing activity.

I do not believe these are problems of quality. They all involve difficult timing and conceptual issues to which there are no easy answers. The Bureau of Economic Analysis must publish its preliminary GNP estimate less than three weeks after the end of each quarter, based on very incomplete input data. In view of what is known about the tradeoff between early estimation and accurate estimation of GNP, it may be unrealistic to expect that the preliminary estimate could be much more accurate than it now is. As you are aware, the Department of Commerce recently discontinued its "Flash" GNP estimate, which was prepared a month earlier than the preliminary one. The decision to discontinue it, which is entirely consistent with the OMB Statistical Policy Directive described earlier, reflected a judgment that the inaccuracy of the "Flash" did not justify its continuation as an indicator of economic conditions. As the government proceeds to evaluate all its principal economic indicators, other cases may come to light where the inaccuracy of early monthly or quarterly data makes them poor indicators of real economic conditions. In such cases, it makes sense to weigh the cost and difficulty of producing more accurate early estimates against the need for such data and the benefits that could be derived from discontinuing such early releases and using resources to improve other statistical data.

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[1] "Principal Federal economic indicators" are the major data series, mainly monthly and quarterly, that are widely used in current economic analysis and forecasting. They include the quarterly GNP estimates, the monthly employment and unemployment estimates, the Department of Agriculture's major crop and livestock estimates, the Department of Labor's consumer, producer, and foreign trade price indices, and such monthly series as housing starts, retail sales, and manufacturers' shipments, orders, and inventories. There are currently 46 releases of data that are designated as principal economic indicators and subject to OMB's directive on procedures for compilation, release, and evaluation. The designations are made by OMB's Administrator for Information and Regulatory Affairs after consultation with affected agencies.

The Bureau of the Census faces an equally difficult problem in producing early monthly estimates of merchandise trade based on reporting from the Customs Service. However, Census has developed a new "revised statistical month" report that is more accurate, but later, than the original "statistical month" report, and BEA has revised its procedures for estimating merchandise trade in the quarterly GNP estimates to make use of the later Census series. It is not clear that much more could be done in the short-term to improve the accuracy of trade estimates that are published so soon after the end of the reference period.

Our statistics clearly do not provide as complete and detailed coverage of the service economy as they do for the goods-producing economy. This may have quite substantial implications for our ability to assess overall economic conditions. Some economists have suggested, for example, that real economic growth may now be underestimated and our balance of payments problems overstated because activity in the service industries is inadequately measured.

While the problem is real, I do not believe the issue is solely one of quality or that the problem could be solved merely by increasing the resources of statistical agencies. Defining measures of output and productivity for the service sector is a difficult task. We need such measures in order to know what data to collect and how to interpret it; therefore, the definitional work has to precede data collection. Measuring foreign trade in services is difficult because there is no obvious point at which to collect data on service transactions.

Efforts are underway to meet these problems. The Bureau of Labor Statistics is working on definitional issues. The Bureau of Economic Analysis is developing a survey to gather new data on international service transactions. OMB is revising the Standard Industrial Classification, with the new SIC to go into effect next January 1st. The revised SIC will add detail to the service sector and reflect organizational changes in banking and finance, communications, and transportation that have come about because of deregulation. It will provide a better basis for developing measures of service activity than the current SIC, which has been unchanged since 1977.

While I do not believe that the quality of our economic data is declining or threatened, there are areas where improvements can, should, and will be made. We believe the regular evaluation of principal economic indicators is important and will enable us to know where certain data are weak and need improvement. There are also several issues relating to the current methods and practices of statistical agencies that should be addressed to assure that the statistical system is able to respond to new demands.

Coverage of Economic Surveys

Many existing economic surveys, particularly of the nonfarm sector, suffer from "coverage" problems -- that is, for various reasons, the data collection fails to "cover" the whole target population. The coverage problem arises from weaknesses in the methods currently used by some agencies to develop sampling frames, and it exacerbates the difficulties of measuring the service sector.

The dominant survey methodologies of some major statistical agencies rely on the use of predetermined lists of firms or establishments as sampling frames. Developed several decades ago, such list frame methodologies are geared to measuring large, stable economic units. The lists often miss a significant portion of the universe of small businesses, new businesses, and businesses that are not in a clearly identifiable plant or office. These are very important elements in the service sector.

An example of the deficiencies of list-based methods can be found in the 1982 Census of Agriculture. After a successful 1978 census that combined list and area sampling methods, the 1982 census was conducted from a list frame alone. This methodology produced the largest errors in recent history. Approximately 15 percent of farms were missed altogether and in some areas more than a third of the farms were left out. The official "count" did not show the full extent of this error because a large number of entities that were not farms were erroneously counted as farms.

The Bureau of the Census is now working in collaboration with the Statistical Reporting Service to develop a combined list-area plan to improve coverage in the 1987 Census of Agriculture. However, coverage is a general problem that need not be dealt with on a case-by-case basis. Statistical agencies should take the initiative to develop new methods and avoid those that are no longer adequate.

To help in such an effort, the Federal Committee on Statistical Methodology has begun a study of the major causes of coverage errors. The study will draw on the experience of the entire Federal statistical community to analyze specific problems and, where possible, recommend solutions.

Securing the Voluntary Cooperation of Respondents

The government needs to do a better job of eliciting respondent cooperation in statistical surveys. While many methodological problems can be addressed by technical solutions, respondent cooperation depends on the confidence and credibility that agencies inspire in their relations with the public.

Respondent cooperation can be affected by sampling methods, however. OMB has undertaken a study of the methods and practices that seven Federal agencies use in conducting surveys of the farm and nonfarm business sector. The study, which covers over 500 different surveys, indicates that probability sampling achieves substantially higher response than less rigorous sampling methods. In part this is due to the additional attention that statistical agencies generally give each respondent in a probability design, but it may also reflect increasing public sophistication about statistical methods. When respondents are kept in survey panels for many years, as they frequently are in nonprobability designs, they have an opportunity to observe what changes are made to update and improve the survey over time and to form an opinion of its worth. If they have doubts about its quality and usefulness, it may affect their willingness to cooperate.

The OMB study also indicated that voluntary statistical programs produce more usable responses than most mandatory programs. The use of coercive authority extracts a price in terms of timely response. In the simplest cases this may be due to the additional layers of review to which businesses subject their responses to assure that legal requirements have been satisfied. But the delays are so extensive in some cases that they suggest a disregard for the timeliness of the information.

Small businesses have shown particular resistance to statistical requests. Most large firms have planning or marketing staffs that appreciate the value of statistical information. Small firms, on the other hand, may feel they have no use at all for statistical information and thus may regard participation in surveys as a waste of scarce resources. When practical motivations are weak, statistical agencies must expend special effort to inspire confidence in their objectives and methods. Agencies must be as open and frank as possible and be sure that the efforts asked of respondents are matched by a thorough and competent job of survey design.

Dependence of the Statistical System on Administrative Reporting Systems

The production of economic statistics depends heavily on access by statistical agencies to administrative records and reports. The Census Bureau is prohibited by statute from surveying regulated industries on the presumption that the more elaborate information collected by regulatory bodies should satisfy any reasonable statistical need. Census also depends upon income tax records to cover small businesses that are not surveyed in the economic censuses and on Customs Service reporting for data on merchandise trade. Other statistical agencies make less extensive but equally important use of administrative data.

The role of statistical agencies as secondary users of administrative records creates some unique problems. From the statistical agency's point of view, administrative data are usually a free good, whose sheer volume is an attraction even when the data available are not the best information for constructing economic series. Tax data are a case in point. Many companies maintain two or more accounting systems - one designed around tax concepts, and one or more others for economic decisionmaking. Data tailored to tax concepts are usually not the most useful for economic and financial analysis. The data are difficult to classify in statistical categories and often fail to meet the standards of definition and precision that are built into statistical data collections.

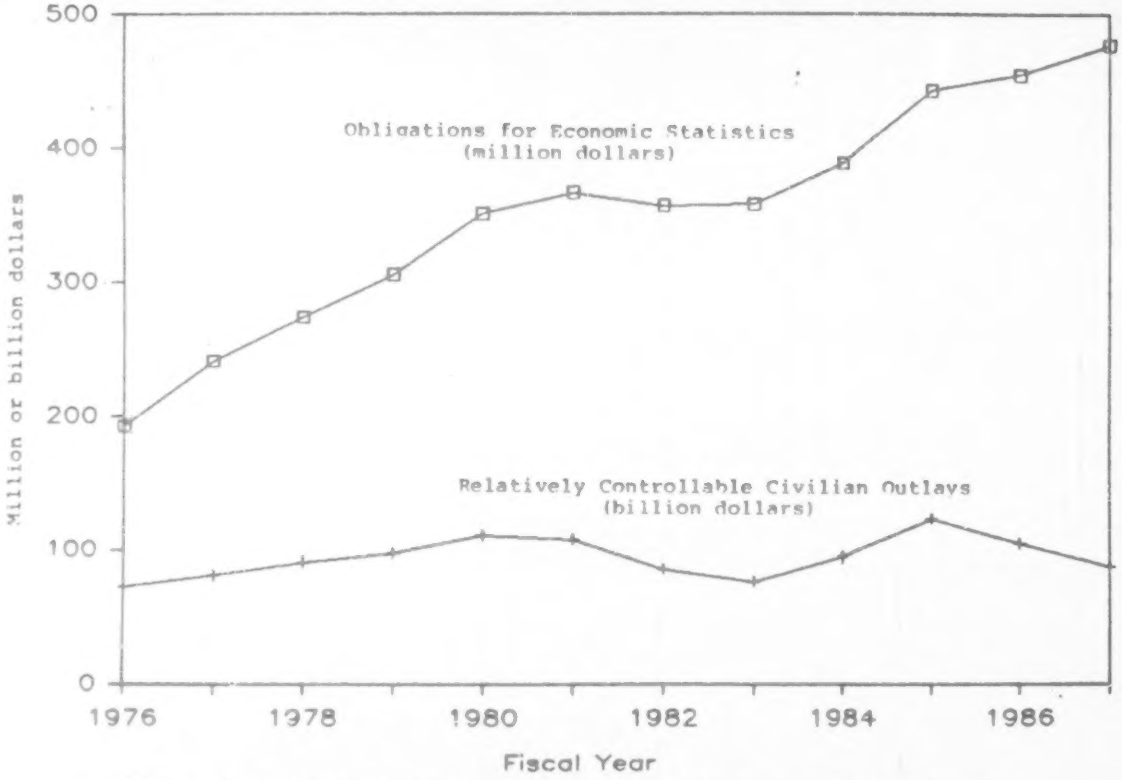
A second problem arises from the differing responsibilities of statistical and administrative agencies. Administrative agencies must conduct their programs in a manner that is both fair and not unduly burdensome to those whom their programs affect. This often produces reporting systems that are not ideal for providing timely, accurate statistics. The current difficulties of the Bureau of the Census in publishing monthly merchandise trade statistics based on Customs Service reporting are a case in point.

The disappearance of administrative reporting systems, such as those that previously supported regulation of energy and transportation, has sometimes been viewed as damaging to the Federal statistical system. The disappearance of these systems does make it necessary for statistical agency to seek alternative estimation techniques based on other kinds and sources of information. However, it also provides an opportunity to develop improved data series that are based on sound economic concepts, rather than concepts designed for tax administration or regulatory purposes.

Statistical Budgets, 1980-87

Some recent reports and newspaper articles on statistical budgets state that budget resources devoted to economic statistics have been severely reduced over the past several years. An examination of statistical budgets from 1980 to 1987 does not support this. The accompanying chart shows that, in contrast to outlays for other

OBLIGATIONS FOR ECONOMIC STATISTICS COMPARED TO RELATIVELY CONTROLLABLE CIVILIAN OUTLAYS, 1976-1987



Note: Economic Statistics includes the budgets of BLS, BEA, EIA, SRS, and ERS (Economic Research Service of USDA) and the Census Bureau's budget for current programs.

relatively controllable civilian programs, spending for economic statistics has increased over the period.

Each year, the Office of Management and Budget publishes a report, Federal Statistics: A Special Report on the Statistical Activities of the United States Government, following the publication of the President's budget. These reports discuss special topics and trends in statistical programs and present both current and historical data on statistical budgets. The accompanying table is based on these reports and the President's budget for fiscal year 1987.

The table presents the budgets in current and constant dollars of the four agencies that produce most of the statistics used for macroeconomic analysis and forecasting. These agencies are the Bureau of Labor Statistics (BLS), the Bureau of the Census, the Statistical Reporting Service (SRS) in the Department of Agriculture, and the Bureau of Economic Analysis (BEA).[2]

The table shows that the budget of the Bureau of Labor Statistics increased by 12 percent from 1980 to 1985 even after compensating for the transfer of direct control of certain trust funds from the Employment and Training Administration to BLS.[3]

The budget for current programs of the Bureau of the Census increased by nearly 24 percent in

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[2] To calculate the budgets in constant dollars, we have applied the fiscal year price deflators for Federal civilian purchases and Federal civilian pay that OMB uses in the preparation of the President's budget. These yield constant dollar estimates that correct for changes in the purchasing power of the dollar. The historical deflators are based on Bureau of Economic Analysis series, while future estimates are derived from the economic projections in the President's budget.

[3] Subtracting the entire amounts of these trust funds from the BLS budget actually understates the growth of BLS resources. Although the trust funds supported BLS programs prior to their transfer, having the funds in its budget enables BLS to manage them more effectively, thus increasing the value of their contribution to BLS statistical programs.

CURRENT AND CONSTANT DOLLAR BUDGETS OF PROGRAMS RESPONSIBLE FOR PRODUCING THE MAJORITY OF ECONOMIC STATISTICS, 1980-1987

	Net obligations in millions of current and 1982 constant dollars				Percent change over period		
	1980	1985	1986	1987	1980-1985	1985-1986	1986-1987
Bureau of Labor Statistics							
Current $	102.9	170.6	187.2	195.9	65.8	9.7	4.6
Constant $	120.5	153.3	164.8	167.0	27.2	7.5	1.3
less trust funds							
Current $	102.9	150.1	152.5	159.4	45.9	1.6	4.5
Constant $	120.5	134.9	134.2	135.9	12.0	-0.5	1.3
Bureau of the Census							
current programs							
Current $	52.5	84.8	86.5	91.7	61.5	2.0	6.0
Constant $	61.5	76.2	76.1	78.1	23.9	-0.1	2.6
Statistical Reporting Service							
Current $	51.2	58.1	56.2	59.7	13.5	-3.3	6.2
Constant $	51.2	52.3	49.4	50.9	2.1	-5.5	3.0
	(1982)*				(1982)*		
Bureau of Economic Analysis							
Current $	15.8	21.8	21.3	23.5	38.0	-2.3	10.3
Constant $	18.5	19.6	18.8	20.0	5.9	-4.1	6.4

*The Statistical Reporting Service did not exist as a separate agency in 1980. These figures are for 1982.

constant dollars over the same period. (This budget excludes the Census Bureau's periodic programs: the decennial population and housing census; the quinquennial economic, agriculture, and governments censuses; intercensal population estimates; and certain support programs for the censuses.)

The Statistical Reporting Service (SRS) in the Department of Agriculture did not exist as a separate agency in 1980 and 1981. However, the SRS budget showed an increase of two percent in constant dollars from 1982 to 1985.

The Bureau of Economic Analysis's budget increased nearly six percent over the period 1980 to 1985.

Due largely to the sequestering of funds mandated by the Balanced Budget and Emergency Deficit Control Act of 1985, the budgets for these four agencies show constant dollar decreases in 1986, ranging from one-tenth of one percent to five and one-half percent below their 1985 levels. However, the President's fiscal year 1987 budget, which accommodates the deficit reduction target in the Gramm-Rudman-Hollings legislation, would give constant dollar increases from 1986 to 1987 to all four agencies, ranging from 1.3 to 6.4 percent.

The only one of these four agencies whose budget has decreased in real terms from 1980 to 1987 is SRS, whose funding in the President's 1987 budget is six-tenths of one percent lower in constant dollars than in 1982. Though this reduction is small, it provides a test of the relationship between budgetary resources and the quality of economic statistics. In the period 1982-85, SRS showed what can be done by reexamining traditional methods of data collection and estimation. SRS has not only launched new high quality programs, but has also eliminated programs of marginal quality and utility. The Department of Agriculture can be proud of the improvement in agriculture statistics brought about by the application of advanced statistical methods in SRS.

In contrast to these four agencies, the Energy Information Administration's budget will decline by about half in constant dollars from 1980 to 1987. Almost all this decline occurred in the wake of deregulation of energy prices, which eliminated the need for data collection and analysis for regulatory purposes. Other reductions in appropriated funds for EIA reflect increased reliance on reimbursable financing, such as a transfer of funding for work performed for the Federal Energy Regulatory Commission.

Another program with a sizable decrease over this period is the Census of Agriculture, conducted by the Census Bureau. The budget for the Agriculture Census will decline by 30 percent from 1980-1982 to 1985-1987 -- comparable periods for this program. However, a decline in this case does not indicate a diminution in quality. Rather, it reflects increased cooperation between the Census Bureau and the Statistical Reporting Service in establishing a more accurate list for mailing census forms to potential farm operators. The two agencies are also cooperating on an area sample to supplement the coverage of the mailing. The combination of these initiatives is expected to improve the coverage and quality of the 1987 Census of Agriculture while reducing its overall cost.

We have also calculated the change from 1980 to 1987 in funding for a category of programs that produce current general economic statistics. This category excludes agriculture statistics. It includes all programs of the Bureau of Labor Statistics; the Census Bureau's current business, construction, manufacturing, general economic, foreign trade, and housing statistics programs; the entire programs of the Bureau of Economic Analysis and the Statistics of Income Division of the Internal Revenue Service; and the statistical activities of the Department of Housing and Urban Development, the Customs Service, and the Federal Home Loan Bank Board. After adjusting the BLS budget to account for the transfer of trust funds formerly controlled by the Employment and Training Administration, the budget represented by this category will increase by over two percent in real terms from 1980 to 1987.

Similarly, the budget for the Census Bureau's quinquennial economic censuses will rise by nearly 18 percent from fiscal years 1980-82 to fiscal years 1985-87, the comparable periods in the cycle of these censuses.

The Role of the Office of Management and Budget

The Office of Management and Budget and before it the Bureau of the Budget have been responsible for oversight of Federal statistical activities since 1939, except for a period from 1977 to 1981 when the function was assigned by executive order to the Department of Commerce. Prior to 1981, the function was carried out under the Budget and Accounting Procedures Act of 1950 (31 U.S.C. 1104), which directs the President to develop programs and prescribe regulations to improve the compilation, analysis, publication, and dissemination of statistical information by executive agencies. The Paperwork Reduction Act of 1980 assigns the responsibility for statistical policy and coordination to OMB and, within OMB, to the Office of Information and Regulatory Affairs (OIRA). The Act gives OIRA four statistical policy and coordination functions: long-range planning, coordination, policy- and standard-setting, and evaluation.

OMB's Statistical Policy Functions

In carrying out its statistical policy functions, OMB's objectives are to assure that the statistics compiled and published by Federal agencies are as useful as possible, that statistical work is done as efficiently as possible, and that the people who provide information to the Federal government for statistical use are treated fairly.

Making sure the results of statistical surveys and studies are as useful as possible requires planning them with a clear vision of the uses to which their results will be put; seeing that data are sufficiently accurate and timely to meet the needs of government and private users; and fully documenting procedures and results, so that users can properly evaluate their quality and suitability for particular uses. Efficiency is a matter of using methods and technology that give us useful data at minimum cost to taxpayers and respondents. Treating respondents fairly is a matter of respecting their privacy and making sure they are not unnecessarily burdened or coerced.

Efficiency and fair treatment of respondents are not values to be "traded off" against the quality of statistics. With all government programs operating under tighter budget constraints today, and with our statistical programs heavily dependent on the voluntary cooperation of the individuals and businesses that provide information to the government, efficiency and fair treatment of respondents are essential to the maintenance of quality.

The issue of documentation is one that we believe is exceedingly important. Complete, clear documentation of each step and process in the production of statistical data and estimates allows users to make informed judgments about the accuracy and usefulness of data for any given purpose, and it demonstrates that estimates have been produced by professionally-sound, replicable methods. It is the best assurance of the integrity of Federal statistics. Before the end of the year, OMB expects to issue new standards for the conduct of Federal statistical activities. These standards will place strong emphasis on the maintenance and publication of complete, current documentation of data and methods.

Our Decentralized Statistical System

In many countries, a single, central statistical office is responsible for conducting censuses and surveys of households and establishments, constructing the national accounts, and developing indices of consumer and producer prices. In the United States, several different statistical agencies in different departments share in this basic economic and demographic statistical work. Our policy is to preserve and strengthen the decentralized Federal statistical system we have.

The budgets of statistical agencies, except in Decennial Census years, represent less than half the United States Government's total spending for statistics. The larger share of the Federal statistical budget covers natural resource statistics and data collection and analysis to support specific Federal programs, such as Medicare, environmental programs, and the biomedical research programs of the National Institutes of Health. These kinds of statistical activities are usually not carried on in statistical agencies. Natural resource statistics are the responsibility of such agencies as the Geological Survey, the Soil Conservation Service, and the Fish and Wildlife Service. Statistical data collection and analysis to support particular Federal programs are generally carried out by the agencies responsible for administering the programs.

All in all, at least 70 separate agencies have statistical activities each with direct obligations of $500,000 a year or more. Of the nine Federal agencies that had statistical budgets of over $50 million last year, four are statistical agencies: the Bureau of the Census, the Bureau of Labor Statistics, the Energy Information Administration, and the Statistical Reporting Service in the Department of Agriculture. The others are the Geological Survey, the National Oceanic and Atmospheric Administration, the National Institutes of Health, the Soil Conservation Service, and the Environmental Protection Agency.

Decentralization of the Federal Government's statistical activities has advantages worth preserving and building upon. One advantage is the relevance of statistics that comes from having statistical programs operated in the departments and agencies that have policy, program, and budget responsibilities in the fields for which the statistics are generated. This is true not only for statistical activities that support specific administrative and research functions of the government, but for general purpose statistical programs as well. Because agencies such as the Bureau of Labor Statistics, the Energy Information Administration, and the Statistical Reporting Service are integral units of their departments, the statistical agencies keep in close contact with the needs of policy officials and program managers. They are also able to share their departments' channels of communication with the Congress and to keep in touch more easily with the major public users of their data.

A decentralized environment also offers the widest possible opportunities for methodological and technological innovation. Decentralization allows program managers in many different agencies to make independent decisions about the methods they will use to collect, analyze, and publish statistics. Methods that prove successful in one agency can be borrowed and adopted by other agencies. At the same time, the consequences of mistakes are isolated and do not impose costs on the entire statistical system. In a decentralized system, attention is more likely to be given to specialized data needs and methodological problems that could easily be overlooked in a centralized system.

There are numerous examples of individual agencies taking a lead in developing and applying improved statistical and management methods in particular areas. For example, the Energy Information Administration is far ahead in the areas of quality control and documentation. The Statistical Reporting Service (SRS) in the Department of Agriculture has taken a lead in the use of area sampling to improve the coverage of its surveys. SRS and the National Center for Health Statistics have developed integrated survey programs that both improve coverage and reduce the cost of surveys. The Statistics of Income Division of the Internal Revenue Service has been innovative in marketing statistical reports. The Small Business Administration has developed an analytical data base entirely from private sector sources. The Bureau of the Census is developing computer assisted telephone interviewing (CATI), a method first used in the private sector, for more widespread government use. Methodological innovations and advances such as these provide models and experience for other agencies and, through "technology transfer," benefit the statistical system as a whole.

OMB plays a major role in providing mechanisms and incentives for technology transfer. We do it, for example, when we review agency budgets and requests to collect data -- we insist that the agencies use the best methods available to publish high quality data as efficiently as possible. The statistical standards we will issue later this year also encourage technology transfer. The standards will be set to reflect the best methods and practices in current use.

We also chair the Federal Committee on Statistical Methodology, a group of senior statisticians from a number of different agencies who study and document the existing practices of Federal agencies and recommend ways they could be improved. In the last three years, reports of this committee have provided guidance on questionnaire design, recommendations for improving industry coding by Federal agencies, and information to enable agencies to make more effective use of telephone data collection in their surveys. These reports, as well as the seminars the Federal Committee holds with interested government professionals to discuss each of its reports, are important mechanisms for the transfer of technology within the Federal statistical system.

In addition to the Federal Committee, OMB organized and chairs an interagency working group that is preparing a report on the electronic dissemination of statistical data. Many Federal agencies are developing electronic dissemination programs today. This new technology presents a cheaper and quicker way to get data to users. However, agencies developing programs had no easy means of sharing information and learning from the experiences of others. The working group has helped fill that gap.

In hearings this Committee held last month, concern was expressed that because OMB's statistical policy office is smaller now than in the past we may not be able to carry out our responsibilities effectively. A simple comparison of staff numbers is quite misleading.

When the statistical policy office was in OMB prior to 1977, it was responsible not only for setting statistical standards and dealing with statistical issues but also for reviewing, under the Federal Reports Act of 1942, all forms used by Federal agencies. Today, the statistical policy office in OMB's Office of Information and Regulatory Affairs deals exclusively with statistical issues. It is consulted by desk officers in other branches of OIRA when they encounter statistical issues in information collection clearance requests, and it uses the information collection review process (the paperwork clearance process) to evaluate the design of statistical surveys and studies before they are undertaken. However, paperwork clearance transactions are now handled by OIRA desk officers that are not in the statistical policy office. A simple comparison of the number of statistical policy employees does not take this into account.

Moreover, because the statistical policy functions are now integrated with the other functions of OIRA and OMB, they draw upon OMB's other authorities to support statistical policy objectives. At the same time, the statistical policy staff is able to provide expertise in support of other OMB functions. Today's statistical policy office is an integral part of OMB.

The Office of Management and Budget has a number of "processes" by which it reviews the activities of agencies in the executive branch. These include the budget review, the information collection review, the information collection budget review, the regulatory review, and the legislative review. Within OMB, the statistical policy office participates in these reviews and makes use of them to coordinate statistical programs, implement long-range plans, and see that governmentwide statistical policies and standards are followed. By being a part of these processes and working closely with OMB budget examiners, desk officers, and legislative analysts, the statistical policy office is able to operate both more effectively and with a smaller staff than would be necessary if it were not fully integrated within OMB and had to maintain separate channels of communication with executive branch agencies. A fair evaluation of the effectiveness of our statistical policy functions should be based on output rather than input -- what we do and how well we do it, not how many people we employ.

* * * *

I want to thank you for your interest in the Federal statistical system and the quality of economic statistics. I do not believe the quality of the Federal government's economic statistics is declining or in jeopardy. However, it can be improved. There are methodological and management issues that need to be addressed by the statistical agencies to make sure that they keep pace with the changing demands of government and the public and with the opportunities opened up by advancing technology and statistical methods. OMB plays a pivotal role in setting policies and standards, planning and coordinating activities in our decentralized system, and evaluating program and agency performance. However, ultimately it is the responsibility of our statistical agencies to seek and apply statistical and management methods that enable them to serve the needs of government and the public as effectively and efficiently as possible.

Senator Sarbanes. Thank you very much, Ms. Gramm, for a very lengthy and complete statement. I am sorry we were not able to get it somewhat sooner. We got it late last night.

I will defer to Congressman Scheuer for a couple of questions. He has to go to another hearing.

Representative Scheuer. Thank you very much, Senator. I very much appreciate that.

Ms. Gramm, I enjoyed your testimony. It was a very thorough and excellent statement of where we are in our economic statistics.

I only have one question. It is sometimes said that the statistical package by which we measure increases in the cost of living of senior citizens is flawed, is faulty, is misleading, because senior citizens don't engage in the kind of activities that contribute significantly to the cost of living. For example, most of them don't buy new cars frequently. Most of them don't rent new apartments or rent new homes at the current high cost of construction and the current high cost of mortgages. Mostly they live in older apartments, older homes built to construction costs of a generation ago at very low mortgage rates compared to today.

So that their cost of shelter, their cost of transportation, even their cost of food is far lower than the average person. In fact, you might say the only thing on which they spend more is in the health expenses, pharmaceuticals, and other products that aren't covered by medicare and medicaid.

What is your analysis of the veracity of the indexes by which we adjust, through the changes in cost of living, the payments due to senior citizens under several of our programs? Are they too much, realistically? Are they too little? Are they about right?

Ms. Gramm. I think you raised a very important question. Whenever you do a cost of living index of some sort, it is going to reflect the market basket of what the average family purchases.

Representative Scheuer. Should we have a separate basket for senior citizens?

Ms. Gramm. That is a possibility.

Representative Scheuer. Go ahead. I want to hear your full answer.

Ms. Gramm. There are a lot of people who don't buy the average market basket. Now we can adjust for some of this in our cost of living index, but by the very nature of its being an index of an average, it is not going to capture all of the different variations among different groups of people. There are advantages and disadvantages to breaking out and trying to make separate indices for separate groups of people for different purposes. You gain something in the sense of having a more realistic reflection of cost changes for particular groups, but you lose something in terms of efficiency and the usefulness of having an index in the first place.

In other words, there are reasons to have a general index in the first place as opposed to having an index for my family, which buys a certain market basket of goods different from other families. The costs and benefits of developing separate indexes have to be balanced.

With respect to the specific question you raised, whether we should have a separate index for the elderly, I would be happy to answer that more specifically after first seeing what we actually do with these indexes. I am not completely familiar at the moment with how the programs work and to what extent different indices are used.

Representative **Scheuer**. I thank you very much. Thank you, Senator.

Senator **Sarbanes**. Ms. Gramm, I want to focus first on the latter part of your statement—on the decentralized statistical system and the role of OMB in this regard. I take it the coordinating role for Federal statistics is in your agency; is that correct?

Ms. **Gramm**. Yes.

Senator **Sarbanes**. Is that a specific responsibility of the division that you are in charge of?

Ms. **Gramm**. Yes. Under the Paperwork Reduction Act, our authorities are for long-range planning for improved performance of statistical programs, coordination through budget review and other means the statistical functions of the Federal Government, as well as development and implementation of policies and standards, and the evaluation of statistical programs.

Senator **Sarbanes**. Where in OMB is that Statistical Policy Office located?

Ms. **Gramm**. It is in the Office of Information and Regulatory Affairs.

Senator **Sarbanes**. Which is a broader office, I take it, than just statistics?

Ms. **Gramm**. That's right.

Senator **Sarbanes**. What other responsibilities does your office have?

Ms. **Gramm**. Other responsibilities of OIRA include information policy and information resources management, which actually goes hand in glove with statistical policy. These are all carried out under the authority of the Paperwork Reduction Act. Paperwork has to be cleared through OIRA. Also, we do regulatory reviews under Executive Orders 12291 and 12498.

Senator **Sarbanes**. How many people are there in the Office of Information and Regulatory Affairs?

Ms. **Gramm**. 68.

Senator **Sarbanes**. Of them, how many of them are in the Statistical Policy Office?

Ms. **Gramm**. We have eight—I believe seven right now, and another one is coming on board, eight.

Senator **Sarbanes**. Is that both professional and clerical?

Ms. **Gramm**. Six professional.

Senator **Sarbanes**. Six of the eight are professional?

Ms. **Gramm**. Yes.

Senator **Sarbanes**. And what GS rankings do they have?

Ms. **Gramm**. One SES, two GS-15's, one GS-14, and two GS-13's. I might add that our Statistical Policy Office not only has line functions, in terms of developing the circulars and directives and chairing working groups on the SIC revisions and the 1990 census, for example, but also they provide input to the desk officers in OIRA, who are routinely going through the paperwork clearance—information collection clearance—process.

Also, our Statistical Policy Office works with budget examiners very closely in reviewing budgets and helping them establish priorities across Government in statistical areas.

In fact, I think the size of the office understates the number that we have working on statistical policy issues, but, in fact, the office is a small office, and that is why we give policy and broad management guidance and work with the agencies in carrying out, and implementing these policies, guidelines, and standards rather than trying ourselves to manage every program.

Senator **Sarbanes**. Is the Statistical Policy Directive No. 3 an example of the work that the Statistical Policy Office does?

Ms. **Gramm**. Yes.

Senator **Sarbanes**. And that is the regulation promulgated last September?

Ms. **Gramm**. September 1985. It is a directive to the agencies.

Senator **Sarbanes**. What was the thinking behind that directive? What was it intended to accomplish?

Ms. **Gramm**. A number of things. First of all, we were concerned about the accuracy and reliability of these 46 principal economic indicators that people in the private as well as the public sector rely on. One important part of the statistical policy directive directs the agencies that produce these indicators to evaluate them for accuracy and usefulness to the ultimate users at least once every 3 years.

Senator **Sarbanes**. Is it your view that there are a significant number of statistics now being collected that need not be collected, or can be done on a longer timeframe? Would you assume that part of this evaluation process would be perhaps to pinpoint the areas in which—either in which you can lighten the workload, in terms of the collection of statistics?

Ms. **Gramm**. Very frankly, no. As indicated in my testimony, I really think that on balance, that the agencies are doing a good job in producing statistics in a timely fashion. They have a very difficult job to do. But I think it is incumbent on them, from a management point of view to evaluate these services for accuracy, reliability, completeness, and accessibility to users. This is the kind of thing that Commerce did with its Flash GNP. They evaluated that themselves and said, it is our evaluation that this Flash GNP estimate is not useful.

Senator **Sarbanes**. Let me ask about that.

According to your directive, and I am looking at No. 3, there is a new requirement that agencies announce planned change in data collection analysis or estimation of this at least 3 months before implementing the change.

This is to allow users of economic indicators to evaluate, comment upon and prepare for significant changes in the method of procedures.

Ms. **Gramm**. Yes.

Senator **Sarbanes**. This time period also gives users an opportunity to inform the agency of the effects of the new policy early enough in the planning process, so that the agency can consider users comments.

Now without addressing the substance of doing away with the Flash GNP figures, in other words, whether we should or shouldn't have them, it doesn't seem to me, just looking at it, that Commerce complied with this requirement.

Ms. GRAMM. They had indicated to their users for some period of time, and their users had been indicating to them, that they had problems with the Flash GNP. So that information was known for some time. In fact, I believe Commerce did comply with this directive.

Senator SARBANES. Did Commerce announce 3 months before it implemented the change that it was going to do so?

Ms. GRAMM. I don't believe they announced that they were going to drop it.

Senator SARBANES. You're the monitoring agency of the various agencies that collect these statistics. It seems to me that this is an instance in which your directive was put to the test and not met. My understanding is that Commerce announced in very late January that they were not going to do the Flash estimate. That was clearly not a 3-month period before implementing this change.

Ms. GRAMM. I don't think they went out with Federal Register notices saying they were going to discontinue it, but——

Senator SARBANES. What is the 3-month requirement? What does the 3-month requirement in your directive mean?

Ms. GRAMM. In our view, they complied with what our policy directive said. May I introduce Dorothy Tella, who is Chief of our Statistical Policy Office.

Ms. TELLA. The provision you cited in Statistical Policy Directive No. 3 is intended to make sure that agencies inform users 3 months in advance of changes in data series, changes in the substance of the data that they produce. We have not interpreted it as requiring 3 months' notification to discontinue a particular series, if there is some evidence that it is wrong. In another section of the same directive, section 6, there is a provision giving guidance to agencies on how they should balance early release and accuracy, guidance on how to deal with revisions in principal economic indicators.

Among the pieces of guidance is that, if an indicator is perennially inaccurate, its release should be delayed, and, in fact, that is what the Department of Commerce did. It continues to produce a preliminary GNP estimate in the first month of each quarter for the previous quarter, but it simply delayed by 1 month the issuance of its first estimate.

Senator SARBANES. Is it your view that if an agency changes the way it collects data or analyze or estimates it, that it has to provide a 3-month notice to the users who sponsor it; is that correct?

Ms. TELLA. Yes.

Senator SARBANES. But if an agency terminates a series, simply ends it, it doesn't have to provide 3-month notice; is that correct?

Ms. TELLA. No. We do not interpret the discontinuation of the Flash as terminating a series. The Flash GNP estimate, in our way of thinking, was simply the first of a series of quarterly GNP estimates. The Department of Commerce continues to publish a preliminary estimate, a revised estimate, and second revision, and we have not interpreted the discontinuation of the Flash as being a violation of our directive.

Ms. GRAMM. Senator, there is another policy circular—the OMB information policy circular—that suggests that if agencies are terminating the publication of information they make sure that their users have adequate notice and have a chance to voice their concerns and their views to the agency. It is our view that Commerce had, indeed, carried out that requirement of the information policy circular.

Senator **Sarbanes**. Did Commerce clear the termination of a Flash with you before doing so?

Ms. **Tella**. No, they did not.

Ms. **Gramm**. It was their decision.

Senator **Sarbanes**. What kind of oversight is that of the Federal statistics? Let me review this very carefully. I think there is a reasonable question whether you ought to have the Flash figure. Some people maintain you don't really need it—you have the preliminary figures which came out today, as a matter of fact. Others say we do need it. If you are going to do away with one, keep the Flash and do away with the preliminary, and you can argue about that.

Now I am talking about the process, and the OMB role as the overseer of Federal statistics. First, I am told that you don't think your directive applied in this instance: if they were going to change how they collected the data, or analyzed or estimated it, they'd have to give 3 months' notice; but if they simply terminated, they would not have to give 3 months' notice. That seems to me the exception swallows up the rule. But then, in addition, I am now being told, I gather, that aside from your view that they didn't have to provide a 3-month notice, that they could terminate it without, in effect, notifying you or having it cleared by OMB.

Ms. **Gramm**. First of all, there is the Information Policy Circular which is different from the Statistical Policy Directive. We believe they have notified their users.

Second, our role is one of oversight. We do not and cannot micromanage every indicator or every statistic that comes out of the agencies. We work with the agencies and, very frankly, if we had received an indication that discontinuing the Flash was a real problem for users, then we could have perhaps gotten together a working group and discussed it. Since we agreed with the decision, this was not necessary.

Senator **Sarbanes**. How would you have gotten that indication when they didn't have to give notice?

Ms. **Gramm**. From users or from other sources.

Senator **Sarbanes**. How would you have gotten that when they didn't have to give notice on it? The reason you issued No. 3, according to your own statement, is that this time period also gives users an opportunity to inform the agency of the effects of the new policy early enough in the planning process for the agency to consider users' comments. That sounds reasonable.

Ms. **Gramm**. Discontinuation of the Flash is not a change in the series.

Senator **Sarbanes**. That sound reasonable and sensible.

Now in this instance, you say they didn't have to give such notice, and since you have stated yourself that the purpose of the time period is to give users the chance to comment, how are users going to comment?

Ms. **Gramm**. First of all, the purpose is to give users the chance to comment on basic changes in a series. This is not a change in the fundamental information that you collect or a change in method—that would affect comparability between, say, revised GNP this year and revised GNP next year. That is not what was being discussed here in the discontinuation of the Flash GNP.

Senator **Sarbanes**. Ms. Gramm, let me just make this point. I don't see how you can elevate changes in the collection or analysis of figures above actually terminating the figures altogether. It seems to me the termination is of a larger magnitude than changes in the collection.

Ms. **Gramm**. Let me mention a couple of things. In fact, we had gotten some input from users, and one of their major complaints was about the inaccuracy and thus the lack of usefulness of the Flash GNP. That is information that Commerce received as well. If it had been discontinued without letting people know or had been a complete surprise to major users, and if they had real problems with the discontinuation, then I am sure we would have heard about it. In fact, we did not hear that. We heard the opposite. But if there had been complaints, we could have taken them up with Commerce and that decision could easily have been revisited.

Senator **Sarbanes**. Is it your view, as the head of the office in OMB that is responsible for coordinating Federal statistics, that an agency can terminate a particular statistic on its own, without having to come to OMB?

Ms. **Gramm**. They didn't terminate a statistic. They terminated the Flash estimate, which is only one estimate of the statistic. You can come out with GNP estimates starting with the first day of the quarter, but they are just not very useful.

Senator **Sarbanes**. I am asking a broader question.

Ms. **Gramm**. The broader question which you asked, which is different than the Flash GNP, concerns terminating, say, a statistical program.

Senator **Sarbanes**. Can an agency do that without paying any attention to the Statistical Office at OMB?

Ms. **Gramm**. It would come through our paperwork clearance process. It would come through our information collection budget process. We have an information collection budget for each agency, whereby we, with the agencies, estimate for every information collection that they have the number of respondent hours. We go through that process every single year. If an agency is closing down one of those information collections, for example, a survey that would produce information, be it for whatever purpose, that we would know about it. But that is different from the Flash GNP.

Senator **Sarbanes**. Your reasoning that it is different from the Flash is that the Flash is only one of a part of a series; is that correct?

Ms. **Gramm**. Yes. Commerce still produces the GNP estimates.

Senator **Sarbanes**. You think Commerce could terminate that without talking to you?

Ms. **Gramm**. Yes.

Senator **Sarbanes**. Now, could Commerce terminate the preliminary GNP figures without talking to you?

Ms. **Gramm**. Conceivably, they could. The question is——

Senator **Sarbanes**. Could they terminate the revised GNP figure without talking to you?

Ms. **Gramm**. Those are major statistical indicators. At some point in time, we would clearly be involved. We would be involved on the important ones.

Senator **Sarbanes**. At one point would you be involved? The logic, as I understand it, is that if you are not terminating the entire series, the agency can act without talking to OMB. I am just trying to find out.

Ms. **Gramm**. Senator, let's take a case that is not like the GNP estimate. Suppose an agency were releasing very early figures based on only one small part of the sample in a major survey, like the CPS.

If they were doing that, and I would question whether they ought to do that in the first place, but if they were doing that, and then they decided not to publish that preliminary information, because nobody was using it, or it was very inaccurate, we would not quarrel with them.

I think that is the issue.

Senator **Sarbanes**. No, the issue is what kind of coordinating role the Statistical Policy Office in OMB is playing with respect to Federal statistics. If you came here and said this morning, you know, it was our conclusion that the Flash ought not to be done; that the agency complied with our requirements in terms of notice, so the users had a chance to voice their opinion, we cleared the decision, exercising our coordinating role of the policy work; that would be one thing——

Ms. **Gramm**. We didn't disagree with them, and we had information from users beforehand.

Senator **Sarbanes**. I asked you earlier, and you told me that you had not——

Ms. **Gramm**. They did not officially clear that with us the way they would an information collection, but if we had disagreed with the termination, we could have reopened the issue.

Senator **Sarbanes**. All right. They didn't do it. Now the next question is, Does that mean that agencies are free to terminate statistics without clearing them with the Statistical Policy Office?

Ms. **Gramm**. We get involved with the principal, the important indicators.

Senator **Sarbanes**. The GNP indicator is pretty important.

Ms. **Gramm**. Not the Flash. It was a very flawed estimate. As I stated before, we did not disagree with them.

Senator **Sarbanes**. As I understood your earlier answer, it is your view that Commerce could eliminate the preliminary GNP without comment——

Ms. **Gramm**. That is not to say that we would allow them to do that. We would not.

Senator **Sarbanes**. You think they have to come to you for clearance?

Ms. **Gramm**. Technically, they would not have to come to us for clearance, but don't think they would eliminate the preliminary estimate without comment. They announced the elimination of the Flash in advance of the next scheduled release date.

Senator **Sarbanes**. What do you envision as the role of the Statistical Policy Office?

Ms. **Gramm**. Broad management guidelines. Providing standards. That is, we tell agencies what we think they ought to do, if they are going to conduct their statistical activities in the best way possible. Then we use all the different processes that we have in OMB, including the budget, information collection budget, paperwork clearance, and legislative reviews, as well as our working groups, not only our interagency working groups, but our cabinet level working groups, to carry those functions out.

That is what we do. We do not get involved, and cannot get involved, in micromanaging anything that the agencies do. The President delegates to his agencies, and we are just providing some help along the side.

Senator **Sarbanes**. What does the term "micromanaging" mean? It seems to me that that termination of some important statistics is not the micromanaging.

Ms. **Gramm**. That was a very flawed statistic. It was not useful. That was information that we had——

Senator **Sarbanes**. Now you are making the substantive case.

Ms. **Gramm**. Right.

Senator **Sarbanes**. I am not arguing the substantive case. There is a substantive case on both sides. The point I am trying to get is, as far as I can perceive it here, OMB was not involved in this decision, it was simply made by the agency.

Ms. **Gramm**. Senator, again, the way the President has to run the Government is that he has to delegate to his agency heads. If the agency head does something that he doesn't like, and through our delegation, for example, if we did not like something that was done, we would talk to them. Sometimes, in some instances, we do have other processes, such as through paperwork clearances, through the information collection budget, through legislative review, through our regular budget, to carry out these functions. This is what we do across-the-board, if we were to disagree on substance, then at that point we would take action. We did not, because we thought they were doing the right thing.

We would like to delegate to the extent possible—I think that is what oversight is. That is, that they carry out the functions they are supposed to, but if we disagree, that is when we get involved.

Senator **Sarbanes**. I think we have pursued this long enough to point out the differences.

I will just by repeating, from your own directive, and I am now quoting:

> The revised directive clarifies and strengthens office management and budget guidance to federal agencies on the compilation and release of principal economic indicators.
>
> It includes more stringent procedures for announcing changes in data collection, analysis and estimation and it adds a new requirement for periodic evaluation of performance of each economic indicator.

And then under No. 3, "Principal changes," is a new requirement that agencies announce "planned changes in data collection analysis or estimation at least three months before implementing the change."

And then, at the end of that paragraph, you state:

This time period also gives users an opportunity to inform the agency of the effects of the new policy early enough in the planning policy, so that the agency can consider the users' comments.

Ms. **Gramm**. Senator, can I make one statement, and then I have a question.

This is not data collection or any of the things that were mentioned there. The Flash GNP does not fall under that part of the statistical directive.

Senator **Sarbanes**. Why not? Because it is a termination?

Ms. **Gramm**. The issue has nothing to do with how the GNP is estimated or with the collection of data for the estimate.

Now I have a question for you, and that is, do you have a substantive problem with the elimination of the Flash GNP?

Senator **Sarbanes**. I think it is arguable. I think there is a case that can be made for it and a case that can be made against it. There have been some respected people in the private sector who have taken issue with terminating the Flash GNP; others have said they think it is all right and call it a preliminary figure. But I want to get into the OMB role in this. Is it your contention that if you change how you collect the data, that would have required a 3-month notice?

Ms. **Gramm**. It is very important. Government can't go out and just decide willy-nilly that they are going to change, for example, what one classification is of a business, where it falls under SIC. They can't willy-nilly change——

Senator **Sarbanes**. But if you terminate collection of the data altogether, that does not require the 3-month notice?

Ms. **Gramm**. They didn't terminate collection of the data. That's important. Now I would like to point out that under our information policy circular, which involves another function that we have in OIRA, given that the Flash GNP does provide information out to the public, our information policy circular says, you should notify your users and let them know if you are going to be reducing some information available to them. We believe they complied with that part of the circular. Our statistical policy directive is aimed very specifically at maintaining the quality of statistics.

Senator **Sarbanes**. Is the Statistical Policy Office today, in terms of personnel, smaller than it's been at any time in the recent past?

Ms. **Tella**. The recent past. It is the same size as it has been since 1982.

Senator **Sarbanes**. But it is significantly smaller than it was prior to the that; is that correct?

Ms. **Tella**. It is significantly smaller than it was when it was housed in the Department of Commerce and it is significantly smaller than it had been when it was in OMB prior to 1977. When it was in OMB prior to 1977, the office, in addition to statistical policy and standard setting, performed the forms review function.

Ms. **Gramm**. Paperwork clearance function.

Ms. **Tella**. Which is now performed elsewhere.

Ms. **Gramm**. By our desk officers. I might add, it is a larger proportion, even though it is very small. OIRA is smaller than I think it was in 1982 and 1983. The office is a small office.

Senator **Sarbanes**. I want to pursue the point that collecting information voluntarily is better then requiring it on a mandatory basis. As a general proposition, I favor a voluntary approach over a compulsory approach.

How far do you carry that? Do you think the census should be done on a voluntary basis?

Ms. **Gramm**. Let me qualify that. Generally, you get better quality data, better response rates through voluntary cooperation, and I believe that a lot of agencies have worked very hard to improve that voluntary cooperation.

Senator **Sarbanes**. Now on the question of the census, what is your position on that? Does that reflect your view that the census should be shifted to a voluntary basis?

Ms. **Gramm**. It might be.

Senator **Sarbanes**. The decennial census?

Ms. **Gramm**. It might be. I haven't looked at that.

Senator **Sarbanes**. Let's be very careful here. This is an imporant statement you are making. I am not pushing you to make it.

Ms. **Gramm**. I would want to look at it very carefully.

Senator **Sarbanes**. You may want to reserve judgment. You are the head of the office that coordinates Federal statistics and you are telling us this morning that you think that the census ought be be placed on—that collection of census information should be placed——

Ms. **Gramm**. I did not say that. I think it should be on a voluntary basis.

Senator **Sarbanes**. What is your view on that?

Ms. **Gramm**. I am not making a judgment. You would have to look at the costs and benefits. Also my contention at the beginning was that, holding everything else constant, you get higher quality statistics when the survey is voluntary. That is, holding other things constant.

Ms. **Tella**. May I, Senator?

Senator **Sarbanes**. Surely.

Ms. **Tella**. Ms. Gramm's testimony this morning referred to a study that we have undertaken in the Statistical Policy Office that focuses exclusively on surveys of the business sector, surveys that seven Federal agencies do of the business sector. Economic surveys are quite different from the decennial census. The evidence based on our study seems fairly substantial that agencies do much better in terms of timely response if they are using voluntary authority rather than mandatory authority.

Senator **Sarbanes**. What do they, say, trade off? Completeness of coverage? Are you trading off completeness of coverage for timeliness of response?

Ms. **Tella**. No. It seems to be the case, based on the study we are doing in cooperation with seven agencies, covering some 500 different surveys——

Senator **Sarbanes**. Did you publish the study?

Ms. **Tella** [continuing]. That voluntary surveys tend to get higher rates of timely response. If you need to get responses so that you can publish an estimate within, say, 20 days after the end of the reference period, voluntary surveys seem to be better. If you don't care when the response comes in, if you don't need to publish data until 6 or 8 months later, then the difference is less marked.

Senator **Sarbanes**. Do you lose on completeness, if you do it on a voluntary basis?

Ms. **Tella**. That does not seem to be the case.

Senator **Sarbanes**. Is that a published study?

Ms. **Tella**. It has not been published. We have not completed it. We have some preliminary findings and tables. This is something we will continue to look at.

Senator **Sarbanes**. Would you make that available to the committee?

Ms. **Tella**. One of the members of our staff gave a presentation last year at the American Statistical Association annual meetings. We can certainly make that material available.

Ms. **Gramm**. Senator, let me point out, in a lot of the surveys we do, for example, telephone surveys, house visits, the issue of "mandatory" doesn't come up in business. It is private individuals.

Senator **Sarbanes**. Did you want to express a view on the census question?

Ms. **Tella**. No. The Census Bureau has authority under title XIII to fine nonrespondents in the decennial census, so it is a moot question. We have no information to lead us to believe that they would do better or worse one way or the other. We lack knowledge about it.

Senator **Sarbanes**. Ms. Gramm, I want to get at a question of sort of general attitude toward statistics.

At our hearing in March, a former administration official was quoted by one of our witnesses as follows:

> The policy environment for statistics should be significantly changed from one in which statistics are thought to be a burden upon responders, a burden that is required to compete with other governmental spending programs for claims against the scarce resources of the Treasury. That should be changed to a policy environment in which statistics are considered to be the necessary foundation for making wise policy decisions or at least informed policy decisions.

What is your view of that statement?

Ms. **Gramm**. I believe that that statement is correct. I believe that statistics are an important foundation for policymakers and for private users as well.

Senator **Sarbanes**. So you don't see them as a burden upon people furnishing statistics, a burden that needs to be——

Ms. **Gramm**. Certainly. Whenever you collect data, an individual has to fill out forms. There are some costs, but those costs, just like any other Government program must be balanced against the benefits. I think what that statement points out is that we should not just focus on the costs. We need also to focus on the benefits. And I believe that, in fact, you have to look at both costs and benefits, but there are real benefits to be had.

Very frankly, it is one of the most useful functions of government to provide information—assuring that truthful, useful information is available to consumers and producers, as well as policymakers.

Senator **Sarbanes**. You see that as a role of the Federal Government?

Ms. **Gramm**. Yes. That is not to say the Federal Government should be a monopolist in the production of statistics. Actually, I find the private sector does a pretty good job in some areas as well.

But by either the private or public sector, the production of information is very important to the proper functioning of the economy.

Senator **Sarbanes**. The attitude that you were expressing here, you feel it is reflected in the approach of the Statistical Policy Office?

Ms. **Gramm**. I've been very pleased with the work that the Statistical Policy Office has done. I know we do not have a lot of resources, but we draw on and work with resources throughout OMB and in the agencies. We have a very good working relationship with the agencies as well. OMB is small and OIRA is very small, given what we do. I think we have done a terrific job.

Senator **Sarbanes**. What does the office do, in terms of convening the statisticians within the Federal Government to see how they can improve or sharpen up in providing Federal statistics?

Ms. **Gramm**. OMB established a Federal Committee on Statistical Methodology in 1975. We chair that committee and raise issues of statistical methodology there. We also chair the Technical Committee on Industrial Classification to carry out the SIC revision. We chair the Federal Agency Council for the 1990 Census. The 1990 census is a very large undertaking and requires a lot of coordination, simply because there are a lot of government agencies that are users. I think there are 12 departments and nine independent agencies that are represented on the Federal Agency Council for the 1990 Census. These groups have been in operation for some time now, and we have had several other working groups to deal with issues such as electronic filing, electronic dissemination of data. As I stated before, I am cochairman of a Cabinet Council Working Group on the Quality of Economic Statistics.

Senator **Sarbanes**. I had some concern with your statement, because it seemed to me that in the face of a considerable amount of informed questions about where we are with our Federal statistics, it was looking at the world through rose-colored glasses.

Ms. **Gramm**. I don't think so, Senator. I raise some concerns and, I believe, problems that are not easily solved that we must continue to work on. I don't believe that I have all the answers at this point. With respect to the budget, I believe——

Senator **Sarbanes**. I am not sure anyone has all the answers. One of the objectives of these hearings is to try to get us on the right path to having a good strong statistical base upon which both public, and perhaps even more importantly, private decisionmakers can rely, since it is an important factor in reaching a whole range of economic decisions.

Ms. **Gramm**. I agree with you, and I agree with a lot of the comments that have been made concerning, for example, merchandise trade data being inaccurate. Those are issues that the agencies are working on and have systems in process that will, hopefully, alleviate some of the problems in the future.

I am not saying that they will be totally eliminated, but things like the automatic broker interface should help.

Senator **Sarbanes**. The point is that this concern is—not simply within the profession, within the trades. It is not as though you are talking about people who are all very much caught up with this. It has now gained a credence outside of the profession. Fortune magazine this month has an article on economic statistics. Actually, it is headed "Economic Statistics: Why They Often Lie," that is going pretty far, I think. And it says, "Those Government-issued numbers on which so many business judgments, plans, and forecasts depend are often seriously defective. Blame bureaucratic inertia, as well as budget cuts." And this is, of course, what we are trying to get at here.

I think there is a problem we have to address. My own perception is that there is, in fact, a substantive problem, to some extent, and there is clearly a problem of perception, which I think is related to the underlying substantive problem. One of the reasons we wanted to hold these hearings was to get you and others who are directly responsible for making sure we have a strong statistical base, sort of concerned and cognizant of the problem, so that it can take some steps to deal with it.

Ms. GRAMM. There are a couple of points I would like to make, one about the budgets themselves. We have information about budgets and where they have been cut, and, as I state in my testimony, showing the figures, in 1986 there have been some across-the-board cuts, but in the President's budget for 1987, if you look at the period from 1980 to 1987, statistical agencies have not been unduly harmed by large budget cuts. In fact, there have been constant dollar increases.

The other issue has to do with lying with statistics. You know, there have been books for years on "How To Lie With Statistics," but again, I believe that the Senator——

Senator SARBANES. I always thought those books were an unfortunate putdown of the importance of the role of statistics.

Ms. GRAMM. I agree. But the putdown should be of the people who misuse statistics.

The other thing is, I do believe that as we get more sophisticated, we place greater demands on data. Some of the problems that have been addressed in the testimony are problems that have existed before. They are well publicized. We have known about them. They are difficult problems. For example, measuring noncash income. How do you value it? That is an issue in basic economic texts. When they explain what the GNP is, I always have had a long session in every basic course, ever since I have been teaching, which has been from 1970 on, that, in fact, there are lots of flaws in GNP estimates, because you don't count, for example, noncash income. How do you account for it—or the underground economy income?

These are problems. But as we become more advanced in our data collection techniques, we try to solve some of these problems. That is not to say that we don't have problems at all. It is simply to say that a lot of the issues that are being raised are difficult issues, and they are issues of long standing.

We do need to continue to work to try and iron some of these things out.

Senator SARBANES. I am not going to explore it in detail here, but the Congressional Research Service of the Library of Congress did an update on the status of major Federal statistical agencies, a report prepared for the House Government Operations Committee—Committee on Government Operations. I want to compare that chart with yours. It is very interesting. The table in your submission here begins in 1976, and this is the line for obligations for economic statistics that runs up here. This is 1980 here, and this is how the table proceeds from there.

Now here is the table that the Congressional Research Service uses—this is 1980—showing major statistical agencies constant dollar budget authority from fiscal 1980 to fiscal 1986. Of course, they show a descending line down to 1983, then just a slight rise, 1984, 1985, another drop in 1986. So this is how they track the dollar money compared with your table—although, if you begin it in 1980, which I guess is the relative comparison, you are really just talking about that much of it.

Well, I am going to submit the tables for the record, along with the chart supporting them. We may, in fact, pursue this further with something of a staff study, because I think it is very important to make sure we are comparing apples with apples and oranges with oranges.

[The tables and chart follow:]

TABLE 1a. Budget Authority for Major Statistical Agencies 1978-1986
(fiscal years)

	1978	1979	1980	1981	1982	1983	1984	1985	1986*
	(millions of current dollars)								
Census Bureau:									
Current programs	47.7	51.0	53.7	57.2	57.2	69.2	77.4	85.5	88.0
Quarterly Financial Report						1.6	1.6	2.1	1.7
Other program transfers						0.5	0.6	0.6	0.5
Other current programs	47.7	51.0	53.7	57.2	57.2	67.1	75.2	82.8	85.8
Population and economic censuses	83.1	201.9	666.5	177.9	87.9	98.9	78.2	81.0	105.8
Bureau of Labor Statistics	84.0	94.8	102.9	111.1	113.1	121.7	137.3	153.8	149.3
Transfers from ETA							5.3	5.8	5.8
CPI revision							4.5	9.7	13.0
Other programs	84.0	94.8	102.9	111.1	113.1	121.7	127.5	138.3	129.5
Energy Information Administration	n.a.	n.a.	90.8	90.4	79.9	56.4	56.4	60.4	58.9
Statistical Reporting Service, USDA 1/	40.4	43.3	49.0	53.8	51.6	51.8	54.4	56.8	57.2
Natl. Ctr. for Health Statistics	38.1	38.8	43.3	37.9	38.2	41.1	46.0	42.7	48.0
Bureau of Economic Analysis	14.1	14.8	15.8	17.1	18.0	19.1	21.0	22.4	21.8
Transfers from IRS & DOC							.7	.7	.7
Other programs	14.1	14.8	15.8	17.1	18.0	19.1	20.3	21.7	21.1
Bureau of Justice Statistics 2/	n.a.	n.a.	16.3	14.1	15.6	16.5	19.1	19.1	19.1
Natl. Ctr. for Education Statistics 2/	18.7	15.4	14.9	14.4	14.4	14.4	14.0	14.0	14.0

See notes at end of table.

TABLE 1b. Budget Authority for Major Statistical Agencies 1978-1986--Continued
(fiscal years)

	1978	1979	1980	1981	1982	1983	1984	1985	1986*
	(millions of 1980 dollars)								
Census Bureau Current programs, excl. transfers	54.8	54.8	53.8	49.5	46.9	52.7	57.6	60.8	60.4
Bureau of Labor Stats., excl. trans. & CPI	96.5	101.7	102.9	96.1	92.6	95.7	97.7	101.5	91.2
Energy Information Administration	n.a.	n.a.	90.8	78.2	64.6	44.3	43.2	44.3	41.5
Statistical Reporting Service, USDA 1/	46.4	46.5	49.0	46.5	42.3	40.7	41.7	41.7	40.3
Natl. Ctr. for Health Statistics	43.8	41.7	43.3	32.8	31.3	32.3	35.2	31.3	33.8
Bureau of Economic Analysis, excl. transfers	16.2	15.8	15.8	14.8	14.8	15.0	15.5	15.9	14.9
Bureau of Justice Statistics 2/	n.a.	n.a.	16.3	12.2	12.7	13.0	13.9	14.0	13.4
Natl. Ctr. for Education Statistics 2/	21.5	16.5	14.9	12.5	11.8	11.3	10.7	10.3	9.9
Total of agencies shown			386.6	342.5	317.0	305.2	315.5	319.8	305.4
Deflator	.87	.93	1.00	1.16	1.22	1.27	1.31	1.36	1.42

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* Administration request, including allocation of proposed 5 percent pay cut.

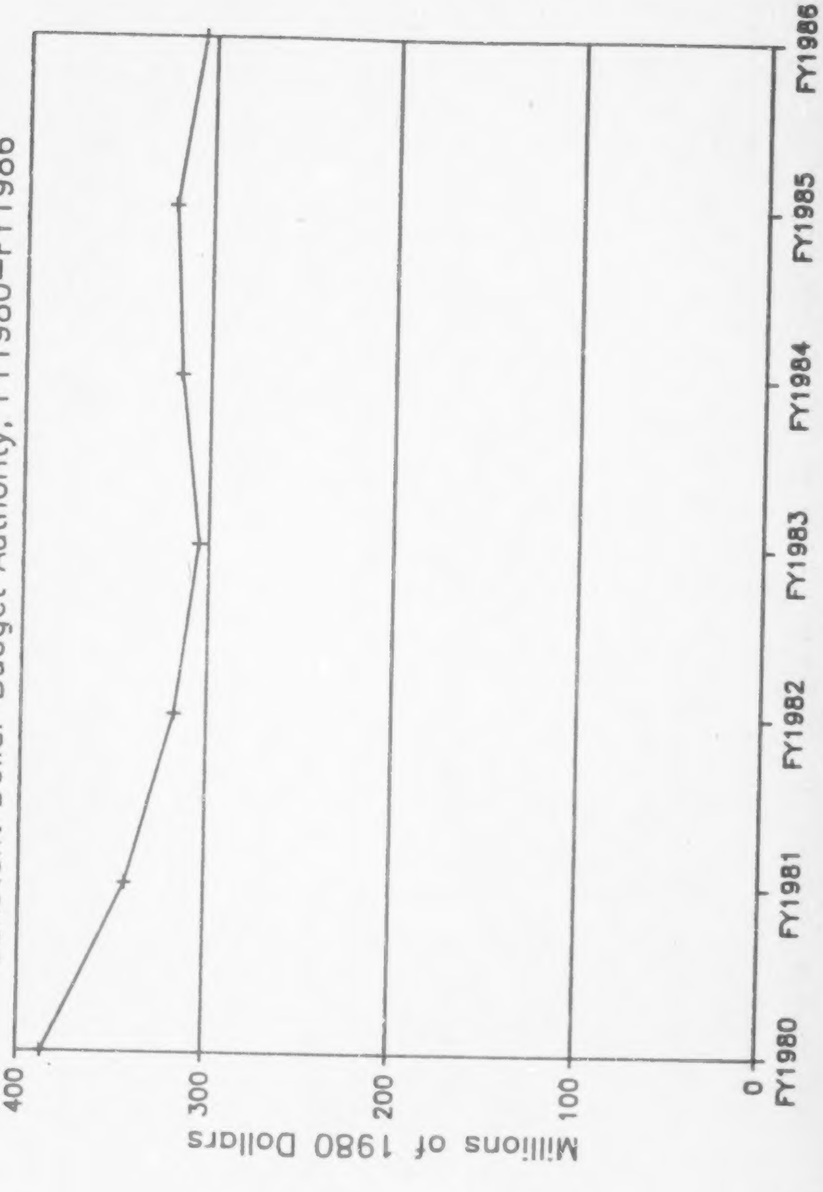
1/ Includes funding for proposed FY 1985 supplemental and excludes proposed FY 1985 rescission.

2/ Includes program funding and salary and expenses from other accounts. Therefore, does not match published data that refer only to program funding.

Sources: Office of Management and Budget and agencies listed.

Chart 1. Major Statistical Agencies:

Constant Dollar Budget Authority, FY1980–FY1986



Ms. **Gramm**. Absolutely. As I stated in my testimony a lot of the different numbers that you see refer to different agencies, or different groups of agencies. Also, they use different price deflators.

I think what is most useful is to go through agency by agency and look at what's actually happened in the budget, in terms of nominal dollars as well as constant dollars.

Senator **Sarbanes**. Let me just take an agency on that, on the Bureau of Labor Statistics, which is an agency that comes before us frequently, since we hold monthly unemployment hearings.

It seems to me, if you are going to make a comparison about the resources of the agency over a time period, you have to exclude out——

Ms. **Gramm**. The trust funds.

Senator **Sarbanes**. Well, you have done that, but I think to go beyond that, you have to exclude out special projects for which special money is provided. For instance, the CPI revision——

Ms. **Gramm**. I don't agree. The CPI revision is part of the ongoing revision of our statistical system. That should be included as part of what we are doing and what government should be doing. If we revise SIC or CPI——

Senator **Sarbanes**. If you take a 1980 figure for the agency that did not include any money for CPI revision and the agency that is continuing all of its activities, but in the 1985, let's say, its budget includes money for a CPI revision, then you think it is proper methodology to compare the 1980 and 1985 figures, including in the 1985 figures, the CPI revision money which was not included in the 1980 figures?

Ms. **Gramm**. I believe that any money that is spent for revision of ongoing statistical programs should be included, and the CPI is one of them. It is different than, say, the census, which comes only once every 10 years; you might want to break that out, because you have a big jump in expenditures. But if you are talking about revising statistics, if you are talking about continuing to improve the quality of statistics, that should be included. That is part of what they should be doing in that agency, and that should be included in its statistical budget.

Senator **Sarbanes**. How do you then address the question as to whether, in real terms, they have been cut with respect to the functions they were charged with doing and were doing in 1980, which, at that time did not include the CPI revision, since it was not in the rotation?

Ms. **Gramm**. They do the CPI.

Senator **Sarbanes**. You have an agency budget in 1980 at this figure, which did not include a CPI revision. Then you have an agency budget in 1985, which includes money to do a CPI revision. And I am simply saying you can't count that in the 1985 budget and compare it with the 1980 budget, if you are trying to examine the question of whether the agency had suffered any real cuts.

Ms. **Gramm**. My view is that it should, and again, obviously, I make an exception for the 1990 census when I say that should be broken out separately.

Senator **Sarbanes**. The principle is no different. The principle is not any different than the decennial census. It obviously should be broken out. Same principle.

Ms. **Gramm**. On balance, you have BLS collecting a lot of statistics, and they are continually improving them. You could say for every economic indicator, or for every statistical series that BLS collects, what has happened to that budget? But in fact, over time, some of those series get changed. They might get merged over a long period of time. And the budgets change.

Now if you want to look at it item by item for all the different thousands and thousands of surveys and statistics that this Government collects, one might do that, but I don't think that gives you a very good idea about what the quality of our statistics is, and it won't tell you whether or not we should be spending more or less. It just will tell you that the budget for some series that was started in 1942 now has less money in it than it did back then.

Senator **Sarbanes**. You are the one who is presenting these figures. All I am trying to do is to make sure that we get them on some reasonable basis, and I am submitting to you that it is unreasonable to compare the 1980 figures, when a particular project that was done periodically was not part of the budget, with a 1985 figure, in which that periodic work comes up and include that figure in, and then compare those figures. You have done the same thing with the employment and training money, as I understand.

Ms. **Gramm**. That's right.

Senator **Sarbanes**. Why should you——

Ms. **Gramm**. The point is this. With employment and training money, that money was included—we took that up because that's trust funds that were transferred from employment and training to BLS.

Senator **Sarbanes**. I am talking about the balance of it.

Ms. **Gramm**. We did not include that. We did not include that in our figures.

Senator **Sarbanes**. Include what?

Ms. **Gramm**. The change in the trust funds, the transfers that——

Senator **Sarbanes**. What about the others, about 6 million dollars' worth that was shifted?

Ms. **Gramm**. Is that the trust fund?

Senator **Sarbanes**. No.

Ms. **Gramm**. The amount of the trust fund? We adjusted for the trust fund.

Senator **Sarbanes**. But there was, in addition, other money that was shifted over to the BLS budget when it picked up that responsibility. As I read your figures, that money has been included, and I am submitting to you that it should not have been.

The upshot of all of this is, if you exclude these various increments, that in fact, they don't get a percentage increase in constant dollars, as your table reflects here.

Ms. **Gramm**. I'm sure that's so. I am sure we could go through and exclude out a lot of things that would get to the numbers that you want to produce.

Senator **Sarbanes**. I don't want to produce any numbers. What I want to do is get an accurate set of figures and make sure that apples are being compared with apples and oranges are being compared with oranges. Now I did not, in a sense, begin this issue. It was your earlier letter in the press that, in effect, raised this issue.

You asserted a 12-percent increase in general purpose statistics, in real terms, in the President's 1986 budget, as above fiscal year 1980. Now what are general purpose statistics?

Ms. **Gramm**. That is defined in our Annual Report on Federal Statistics, and we specify all the agencies that are being considered in this general purpose category.

Senator **Sarbanes**. Who agrees with that definition?

Ms. **Gramm**. We determined it in 1984. However, what we also do here, and I think this is the proper approach, is to go agency by agency.

Senator **Sarbanes**. Is EIA a general purpose statistic?

Ms. **Gramm**. No; it is not. The agencies included in the category we call general purpose statistics are the Economic Research Service and SRS in USDA, Census current programs, BEA, National Center for Health Statistics, Bureau of Mines Statistical Programs, and BLS.

Senator **Sarbanes**. Bureau of Mines is a general statistics——

Ms. **Gramm**. The Statistical Programs of the Bureau of Mines.

Senator **Sarbanes**. Those are general purpose statistics?

Ms. **Gramm**. Yes. Again, as I said before, no single classification is obviously the "right" one. That's why I think it is useful to go on an agency-by-agency basis.

Senator **Sarbanes**. I am submitting for the record the CRS tables, the budget authority for major statistical agencies of 1978 through 1986, and the chart which I earlier pointed out. What they show is that, in fact, these agencies have been going through a very difficult budget period, and that there is no such thing, really, as a real increase in their budgets.

Ms. **Gramm**. There is another aspect. You know, a lot of these tables use budget authority. We believe that obligations are the numbers that you should be interested in. I would be happy to look at that and comment on it and point out where their numbers differ from ours and why, just for purposes of comparison.

Senator **Sarbanes**. Well, you are quite welcome to do that, and you can submit it to the committee. Then I think you need to explain why you would include, for instance, in the BLS, transfers from ETA, which run at about $6 million and the CPI revision, which, in 1986, is going to be $13 million.

Ms. **Gramm**. We do not include the trust funds.

Senator **Sarbanes**. I understand you don't include the trust funds.

Ms. **Gramm**. I thought you just said you explain why we include it——

Senator **Sarbanes**. I'm talking transfers from ETA. That is separate and apart from the trust funds.

Ms. **Gramm**. I see. The other transfers. I understand. We'd be happy to.

Senator **Sarbanes**. Particularly in view of the fact that you at least considered that the trust funds were not included, while you include the other ETA transfers. There was no CPI revision money until 1984. Then it appears at $4.5 million in 1985, $9.7 million in 1986. They are about to finish the CPI. That's a sort of a one-shot thing.

Now to say that you ought to be able to count that money in comparing funding levels over a period of time seems to me is to miss the mark.

Ms. **Gramm**. Senator, I think, again, what numbers you use depends on what use you want to put them to. Let me give you an example. If you want to know how the agencies have done on some of their basic programs, what they would have done if they had no revisions, no improvements, no new statistical series started up, then you might have a point there. But if you are looking at how much money the Government spends for statistical purposes, then you would want to include such money. For example, let's suppose the Government establishes a new statistical series. This is new information, and we're going to provide that to you. And that's going to cost $10 million. We didn't have that in 1980.

What Government does, in terms of statistical activities, new programs, new surveys, new series should be included. But they should not be included if you want to know—which is, I think, the question you are asking—how much money are we spending today on programs that were in place in 1980, unchanged.

Senator **Sarbanes**. No. The only point I am addressing is the assertion that this agency has received a real increase in its budget, and the inclusion in making that determination of either a new program or a sort of one-shot periodic program and counting the money that goes to that program and making the comparison, that is all. It seems to me that what you are doing really clouds the issue. We ought to be able to lay this thing out and clearly look at what the agencies are getting.

My perception of the BLS budget, for instance, which is the one that we deal with most closely here, is that it has suffered real decreases between 1980 and 1985. It came back a little bit in 1985, but there were some real decreases. In making that comparison, I don't include the CPI money, because I don't think it should be included. It wasn't part of their base in the earlier years. It is going to drop out again in future years. That ought to be treated as something separate and apart in the course of making this comparison.

Ms. **Gramm**. I agree, but the point is, the CPI is an index that BLS keeps up, and it should keep revising it. That is money the Government spends on statistics and in maintaining the quality of statistics. If that is what you are interested in, then it should be included, because presumably, by revising the CPI, you are going to improve the quality of that statistic. But we disagree on that.

Senator **Sarbanes**. No, I don't disagree on improving the statistical base. I am just challenging an assertion of a real increase in the budget, when you are not comparing the same thing. That is just a game.

Ms. **Gramm**. It's a budget obligation.

Senator **Sarbanes**. You can't play that game. If I gave your agency additional responsibility and additional money, and then sharply cut the amount of money you had to do all your other activities, I don't think I would then assert that you were getting a real increase in your budget.

Ms. **Gramm**. Two things. One, I think it is BLS's responsibility to keep the CPI in good shape. Second, there are two questions here. You're raising one question. The question that I raised, which I think is what the committee—at least I thought the committee—was interested in early on, is how much money is the Government spending to maintain the quality of its statistical series? The CIP is a BLS statistical series, so it should be included. That is different from saying, what would we be spending if nothing happened, if we didn't improve the CPI, if we didn't add in a new index.

Senator **Sarbanes**. It is my view that there is no way you can make the assertion you have made, in terms of percentage of real increase in the budgets in statistical agencies. One of the reasons there is so much concern, not only in the statistical community but more broadly, is that careful reading of these budget figures does not support your assertions. What others perceive is exactly what that line shows, which is a tightening of the resources. That is a problem we have to face.

I am not pretending the solution is easy. But it is a problem you need to address, and Congress needs to address. The first step in addressing it is to recognize the problem and not by using inappropriate comparisons, assert that there has been a significant real increase in the budget. That hasn't happened.

Ms. **Gramm**. The problem that you address, the broader problem, I agree with, and that is that in tight budget times, we need to be very careful about the allocation of scarce budget dollars, taxpayer dollars on these programs. That is one of the purposes of the Economic Policy Council work that we are going to be taking up. So I don't disagee with that.

Senator **Sarbanes**. What is your sensitivity to this point in overall budget terms? The amount of money we are talking about is very small. It is less than two-tenths of 1 percent of the Federal budget, but for the particular agencies, which, by and large, are small and run fairly tight ships, particularly over a time of squeezing budgets, that they really just can't sustain some of these cuts. It really has an impact on them far out of proportion to what the comparable percentage cut would have on a much larger agency that has more leeway in order to absorb the cuts.

What is your view of that problem? Do you agree with that?

Ms. **Gramm**. I think, definitely, when you deal with small agencies, especially agencies that have mostly personnel, a Gramm-Rudman-Hollings' across-the-board cut is very tough.

Senator **Sarbanes**. You are stategically located in the Office of Management and Budget. Do you think you are going to be able to do anything for these agencies? You have a double responsibility here. You are in OMB, so you carry a budget responsibility, but you are also the focal point for Federal statistical effort.

Ms. **Gramm**. Right. In fact, our Statistical Policy Office works very closely with the budget divisions of OMB in analyzing statistical budgets, to ensure that we have enough money there, and I think—and again, we disagree—but I think on balance, we have been able to do a pretty good job.

Senator **Sarbanes**. I am going to have to go vote. I am going to let you go, Ms. Gramm, so you can get back to trying to be of assistance to these agencies and their budgets. I think the budget situation is more serious than what you have set out in your statement, and I think a careful analysis of the figures will support that.

In any event, I think it is important for all of us who recognize the importance of statistics—and I am glad you agreed earlier on the importance of statistics and of our trying, all of us to figure out ways to assure that the United Sttes will have a first-rate statistical base. I am very frank to tell you that I think this factor may, in fact, put us at some disadvantage in our international competitiveness, and that is why I read the Japanese quote about their month-long national celebration of statistics. In their view, statistics are the beacon of a happy life.

With that admonishment, I think we will let you go.

If the panel could take their seats, I will be back in about 5 minutes, as soon as I go and vote.

Ms. **Gramm**. I was just going to say I agree with you, and I think we need to work together so we can produce quality statistics.

[The following information was subsequently supplied for the record by Ms. Gramm:]

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

JUN 25 1986

Honorable Paul S. Sarbanes
United States Senate
Washington, D.C. 20510

Dear Senator Sarbanes:

When I testified before the Joint Economic Committee on April 17 about the quality of economic statistics, I agreed to provide the Committee with the following information.

(1) A response to Representative Scheuer's question about the appropriateness of the price indices used to make cost-of-living adjustments in programs that provide benefits to senior citizens.

(2) A summary of the initial results from OMB's study of response rates in business surveys.

(3) An explanation of the difference between the statistical agency budget figures presented in my testimony and other OMB publications and the figures contained in the report, "An Update of the Status of Major Federal Statistical Agencies, Fiscal Year 1986," published in 1985 by the Congressional Research Service.

This information is provided in the enclosures to my letter. Enclosure 1 is my further response to Representative Scheuer's question. Enclosure 2 provides a table and explanatory notes summarizing preliminary findings in the response rate study. The differences between OMB statistical budget figures and the figures in the CRS report are discussed in Enclosure 3.

I hope the Joint Economic Committee finds these materials useful. If I can be of further assistance to the Committee, please let me know.

Sincerely,

Wendy L. Gramm

Wendy L. Gramm
Administrator for Information
and Regulatory Affairs

Enclosures (3)

Enclosure 1 to Letter from Wendy L. Gramm to Senator Paul S. Sarbanes.

Response to Representative Scheuer's question: What is your analysis of the veracity of the indexes by which we adjust, through the changes in cost of living, the payments due to senior citizens under several of our programs? Are they too much, statistically? Are they too little? Are they just about right?

The Bureau of Labor Statistics (BLS) does not produce a separate Consumer Price Index (CPI) for any subgroup of consumers, including senior citizens. BLS does produce a monthly index for each of two urban consumer population groups, one consisting only of wage earners and clerical workers and the other consisting of all urban families. Both exclude most rural families and the military and institutional population. The wage earner index (CPI-W) is a continuation of the historic index that was begun during World War I for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all urban index (CPI-U) introduced in 1978 is representative of the buying habits of about 80 percent of the noninstitutional population of the United States, compared with 40 percent represented in the CPI-W.

Several Federal programs use the CPI or its component series to adjust for changes in the purchasing power of the dollar. For example, Social Security benefits are adjusted by the CPI-W, income tax brackets by the CPI-U, and school lunch payments by the CPI component series, "Food away from home." In none of these cases, however, are benefits adjusted by a special CPI developed for a particular subgroup of the population.

In my view, it is appropriate to use a general price index to make cost-of-living adjustments in Federal payments rather than a special index developed for the group that receives the payments. Although it may seem more equitable to adjust payments by an index that reflects the expenditure patterns of the recipient group rather than of the general population, available evidence suggests that the variance in expenditure patterns may be as great within such groups as within the general population. Thus a special index would not necessarily resolve the equity issues. Moreover, as relative prices and marketbaskets change over time, an index that appeared to benefit one group at one point in time could be detrimental at another time.

Enclosure 2 to Letter from Wendy L. Gramm to Senator Paul S. Sarbanes.

Summary of Initial Results from OMB's Study of Response Rates in Business Surveys

In late 1984, OMB solicited the cooperation of seven Federal agencies (the National Agricultural Statistics Service, the Economic Research Service, the Bureau of the Census, the Bureau of Economic Analysis, the Energy Information Administration, the Bureau of Mines, and the Bureau of Labor Statistics) in a study of their methods and practices in surveying business firms and establishments. The agencies provided OMB with information about the design, follow-up practices, and response rates in over 600 different surveys of farm and nonfarm businesses. The information constitutes a rich data base for OMB and the agencies to explore various relationships between survey design, respondent burden, and quality of response. OMB started its analysis of the data last year, focusing first on examining the relationship between the use of mandatory reporting authority to collect information and the response achieved.

The accompanying table summarizes data on the response rate experience of the seven agencies included in the study. Of these agencies, the Energy Information Administration uses mandatory authority in most of its surveys while the Commerce Department agencies (the Bureau of the Census and the Bureau of Economic Analysis) conduct both mandatory and voluntary surveys. The other agencies rely almost exclusively on voluntary data collection. The Census Bureau does a sufficient number of both so that separate summary statistics could be shown for mandatory and voluntary surveys. The first three agencies listed in the table: the Energy Information Administration, the National Agricultural Statistics Service, and the Bureau of the Census provide enough examples of different types of surveys to show separate summary statistics for censuses, probability samples, and all other designs. For each agency and type of survey, the table shows four summary statistics, explained in the Notes to the table: Average Final Response, Average Timely Response, and two Early Response Index numbers.

As the table shows, the National Agricultural Statistics Service's voluntary program scored high on both final response rate and the normalized early response index. EIA's censuses and probability surveys scored high on final response rate but much lower on the index. The Commerce Department agencies showed the lowest scores on the index. Their average performance was clearly dragged down by the slow response to mandatory surveys. The high index score for EIA's "Other surveys" reflects the effect of a few uniquely-designed "fast response" surveys. However, the National Agricultural Statistics Service achieved index scores almost as high for its entire program of voluntary surveys.

While further analysis is needed to explain them fully, two important findings have emerged from the study to date. One is that probability sampling achieves substantially higher response than less rigorous sampling methods, a result that may be explained, at least in part, by the greater attention agencies generally give each respondent in a probability survey. The other striking finding is that voluntary surveys yield higher rates of timely response than most mandatory surveys. The use of coercive authority clearly extracts a price in terms of timeliness. This may be due in part to the additional layers of review to which businesses subject their responses to assure that legal requirements have been satisfied. However, the delays in reporting are so long in some cases that they suggest a disregard by both sponsor agency and respondents for the timeliness of the information.

OMB is continuing its analysis of data in the business survey study as a basis for developing long-range plans to improve response to government surveys of the business sector and for developing government-wide policies and standards for the treatment of respondents. The analysis to date suggests strongly to us that careful attention to the design of surveys, not the threat of legal penalties, is the key to gathering accurate, timely information for statistical purposes.

RESPONSE AND RESISTANCE TO BUSINESS SURVEYS*

Agency/ Type of Survey	Number of Surveys	Average Final Response	Average Timely Response	Early Response Index	
				Per Day	Per Month
Energy Information Administration					
Censuses------	29	97	76	3.12	66
Probability Samples-----	5	93	59	1.14	24
Other---------	15	97	79	> 22	> 460
National Agricultural Statistics Service					
Censuses------	56	98	same	11.06	232
Probability Samples-----	99	91	same	11.78	247
Other---------	107	63	lower	> 12	> 250
Bureau of the Census					
Censuses------	96	79	33	1.92	40
(Major censuses only)-------	(9)	(82)	(43)	(1)	(22)
Probability Samples-----	42	85	47	2.75	58
Other---------	22	80	47	1.89	40
Mandatory-----	99	83	35	1.63	34
Voluntary-----	61	79	44	3.01	63
Bureau of Labor Statistics					
Mean	24	84	68	2.36	49
Median		85	67		
Bureau of Economic Analysis					
Mean	29	80	53	1.21	25
Median		85	50		
Economic Research Service					
Mean	13	73	55	2.45	51
Median		82	60		
Bureau of Mines					
Mean	109	85	64	2.71	57
Median		93	73		

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*Results originally presented to the American Statistical Association, August, 1985.

NOTES

The seven agencies are listed in two groups. The first three provided enough examples to break out censuses, probability samples, and all other designs. The last four provide fewer examples or examples of only one type of design. In these cases, where survey types are not broken out, median as well as mean values are displayed. Within each group, agencies are listed in order of increasing variance for the "Final Response" variable. If all agencies were listed in variance order, the order for Census and BLS would be reversed.

Number of Surveys: a count of the surveys reflected in the average final response for each category. Estimates of timely response and the early response index reflect the same or smaller number of surveys for which such data were reported. Small numbers, e.g. EIA probability samples, imply less reliable averages.

Average Final Response: mean of reported (percent) values with some adjustments derived from "comments" provided by agencies. Most values in the "Other" categories are conservative estimates (some out-of-scope counted as nonresponse). However, Census "Other" and small censuses show overstated rates caused by the elimination of persistent non-respondents from the surveys and hence from the response rate calculations.

Average Timely Response: percent response achieved prior to follow-up (on or soon after the "requested response date") except for the National Agricultural Statistics Service (NASS) which sets final cutoffs that are shorter than the follow-up dates in most agencies. This measures the level of cooperation achieved without the expense and program delays entailed in follow-up. With few exceptions the final cutoffs and response rates reported by NASS were equivalent to the values reported by other agencies for timely response.

Early Response Index: timely response rates divided by the number of working days between the end of the reference period (ERP) and the date by which that response rate is achieved ("per month" index is then "per day" x 21). This index adjusts for the large differences in timeliness requirements on the premise that rapid response reflects a higher degree of cooperation by the respondent (or conversely that an early cutoff - as in NASS - may truncate response). Average index values preceded by a "greater than" symbol reflect highly skewed observations where individual surveys varied considerably around the mean value.

Types of Surveys: Censuses are essentially-complete enumerations of a well-defined population (small censuses enumerate all businesses in a narrow class of economic activity). Probability surveys are any of a variety of designs with selection based rigorously on probability theory. Other surveys are generally compromise designs that are based neither on complete enumeration or probability theory -- some surveys planned as censuses were reported in this category when they failed to achieve adequate coverage.

Enclosure 3 to Letter from Wendy L. Gramm to Senator Paul S. Sarbanes.

Explanation of Differences Between OMB and CRS Statistical Agency Budget Estimates.

In the hearings held by the Joint Economic Committee on April 17, 1986, a question arose about the reasons for the different trend shown in the graph on page 10 of the testimony of OMB's Administrator for Information and Regulatory Affairs and a similar graph, chart 1, in the Congressional Research Service report, "An Update on the Status of Major Federal Statistical Agencies, Fiscal Year 1986." The OMB chart shows the combined obligations from FY 1976 through FY 1987 of a group of agencies that includes the Bureau of the Census (obligations for current programs), the Bureau of Labor Statistics (BLS), the Bureau of Economic Analysis (BEA), the Statistical Reporting Service (SRS, now the National Agricultural Statistics Service), the Economic Research Service (ERS), and the Energy Information Administration (EIA). The graph in the CRS report shows, for FY 1978 through FY 1986, estimates of budget authority in 1982 dollars for a different group of agencies that includes the Bureau of the Census (current programs), BEA, BLS, SRS, EIA, the National Center for Health Statistics, the National Center for Education Statistics, and the Bureau of Justice Statistics.

The different trend shown in the two graphs mainly reflects the fact that the OMB graph is in current dollars and the CRS graph is in constant dollars. However, OMB calculations of the constant dollar budgets of the same group of statistical agencies included in the CRS report show a different trend from that reported by CRS. This difference has two sources: 1) OMB's current dollar figures represent direct obligations whereas CRS's represent budget authority, and 2) the deflators used by OMB and CRS to convert current dollars into constant dollars are different.

To show the impact of these differences, we have prepared the two attached tables. Table 1 shows the budget obligations for fiscal years 1978 through 1987 for the agencies included in the CRS report. Table 2 shows the obligations in constant (1982) dollars, estimated using the price deflators traditionally used by OMB in reporting on statistical budgets.

A comparison of Table 1 with Table 1a in the CRS report shows that slight differences in the year-to-year trends can be attributed to the use of budget authority by CRS and obligations by OMB. Since obligations are the amounts of legally binding commitments made by an agency during a given period, we believe they more accurately reflect the resources in use during a fiscal year.

To convert current to constant dollars, we relied for historical data upon BEA's estimated deflators for Federal nondefense nonpay purchases and Federal civilian pay. The two deflators were weighted according to the relative levels of expenditure for the nondefense portion of the Federal government in FY 1983. (Because the proportion of pay and nonpay expenditures varies from agency to agency, this deflator may understate or overstate real growth in a given agency. Real growth would be greater than our constant dollar figures indicate for agencies that have a higher proportion of their budget going to pay and less for agencies that have a higher proportion going to purchases.)

These calculation~~s resu~~lt in slightly different deflators from those used by CRS for FY 1978-85. The biggest difference between our deflator and that used by CRS is in fiscal year 1986. In our report, *Federal Statistics: A Special Report on the Statistical Programs and Activities of the United States Government, Fiscal Year, 1986*, we deflated FY 1986 obligations using BEA's model and the economic and budget assumptions in the President's budget, including a five percent pay cut for all Federal civilian employees. The constant dollar estimates for FY 1986 that appear in the April, 1986 testimony of the Administrator for Information and Regulatory Affairs use a revised deflator reflecting the assumptions for 1986 contained in the President's budget for 1987. In both cases, the increase in the OMB deflator for 1986 is much smaller than the increase in the deflator used by CRS, which appears to overstate substantially the probable increase in Federal agency cost.

While I trust that this explanation clarifies the differences, I would like to emphasize that dollars provide only a rough indication of the Federal effort to maintain high quality statistics. OMB's primary concern is to maintain and improve the quality of Federal statistics. A careful analysis of changes in data quality cannot rely solely upon an examination of budget aggregates. It must also examine how the budgets are allocated within the agencies, how efficiently programs are conducted, and how priorities are determined. As I mentioned in my testimony, we are now revising our statistical policy directives to provide more detailed guidance on planning, conducting, documenting, and publishing statistical studies. The revised guidance should lead to further improvements in the quality of Federal statistical programs.

TABLE 1

PRINCIPAL FEDERAL STATISTICAL AGENCIES
(budget obligations in millions)
current dollars

	FY1978	FY1979	FY1980	FY1981	FY1982	FY1983	FY1984	FY1985	FY1986 Original	FY1986 Revised	FY1987 Est.
BUREAU OF THE CENSUS											
current programs	48.0	51.0	53.7	6.9	59.2	69.1	77.7	84.8	87.9	86.5	91.7
periodic programs	73.0	160.1	702.1	192.7	87.9	96.1	89.1	89.2	105.8	111.2	185.6
BUREAU OF LABOR STATISTICS	83.8	94.9	102.9	109.9	111.6	121.3	136.3	170.6	184.6	187.2	195.9
less trust funds								150.1	148.3	152.5	159.4
BUREAU OF ECONOMIC ANALYSIS	14.0	14.6	15.8	17.1	18.0	19.1	21.0	21.8	21.8	21.3	23.5
NATIONAL AGRICULTURAL STATISTICS SERVICE, USDA					51.2	51.7	54.4	58.1	57.2	56.2	59.7
ENERGY INFORMATION ADMINISTRATION	50.7	65.6	88.2	89.8	77.8	58.1	55.6	60.9	58.9	57.7	59.7
NATIONAL CENTER FOR HEALTH STATISTICS	37.3	38.9	43.3	33.7	37.7	40.8	46.0	42.8	48.0	44.7	50.0
BUREAU OF JUSTICE STATISTICS			17.8	12.3	17.7	17.1	18.6	19.7	19.3	19.7	21.7
CENTER FOR STATISTICS, EDUCATION	13.9	13.0	9.9	8.4	8.5	8.6	14.1	14.1	14.2	14.7	24.7

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1. Obligations reflected in the President's budget for 1986.

2. Estimated obligations for 1986 including the effects of the sequestering of funds mandated by the Balanced Budget and Emergency Deficit Control Act of 1986.

3. Formerly the Statistical Reporting Service, USDA.

4. Obligations for FY1978 through FY1986 are for the National Center for Education Statistics. The FY1987 obligations are for the newly formed Center for Statistics that includes the statistical programs formerly in NCES and other statistical programs in the Department of Education.

TABLE 2

PRINCIPAL FEDERAL STATISTICAL AGENCIES
(budget obligations in millions)
constant 1982 dollars

	FY1978	FY1979	FY1980	FY1981	FY1982	FY1983	FY1984	FY1985	FY1986 Original	FY1986 Revised	FY1987 Est.
BUREAU OF THE CENSUS											
current programs	64.6	64.5	62.9	60.7	59.2	66.0	71.9	76.2	78.2	76.1	78.2
periodic programs	98.3	202.4	822.1	205.4	87.9	91.8	82.4	80.1	94.1	97.9	158.2
BUREAU OF LABOR STATISTICS	112.9	120.0	120.5	117.2	111.6	115.9	126.1	153.2	164.2	164.8	167.0
less trust funds								134.9	131.9	134.2	135.9
BUREAU OF ECONOMIC ANALYSIS	18.9	18.5	18.5	18.2	18.0	18.2	19.4	19.6	19.4	18.8	20.0
NATIONAL AGRICULTURAL STATISTICS SERVICE, USDA					51.2	49.4	50.3	52.2	50.9	49.4	50.9
ENERGY INFORMATION ADMINISTRATION	68.3	82.9	103.3	95.7	77.8	55.5	51.4	54.7	52.4	50.8	50.9
NATIONAL CENTER FOR HEALTH STATISTICS	50.2	49.2	50.7	35.9	37.7	39.0	42.6	38.5	42.7	39.3	42.6
BUREAU OF JUSTICE STATISTICS			20.8	13.1	17.7	16.3	17.2	17.7	17.2	17.3	18.5
CENTER FOR STATISTICS, EDUCATION	18.7	16.4	11.6	9.0	8.5	8.2	13.0	12.7	12.6	12.9	21.1

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1. Deflator used to derive constant dollar obligations reflects the economic and budget assumptions used in the preparation of the President's 1986 budget.

2. Deflator used to derive constant dollar obligations reflects the economic and budget assumptions used in the preparation of the President's 1987 budget.

3. Formerly the Statistical Reporting Service, USDA.

4. Obligations for FY1978 through FY1986 are for the National Center for Education Statistics. The FY1987 obligations are for the newly formed Center for Statistics that includes the statistical programs formerly in NCES and other statistical programs in the Department of Education.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

JUL 24 1986

Honorable Paul S. Sarbanes
United States Senate
Washington, D.C. 20510

Dear Senator Sarbanes:

I am enclosing responses to the additional questions you asked me in your letter dated June 12th. I am happy to be able to assist the Joint Economic Committee in its investigation of the quality of our economic statistics.

Sincerely,

Wendy Gramm

Wendy L. Gramm
Administrator for Information
and Regulatory Affairs

Enclosure

Enclosure to Letter from Wendy L. Gramm to Senator Paul S. Sarbanes

ANSWERS TO ADDITIONAL QUESTIONS ASKED BY SENATOR SARBANES

1. At the April 17 hearing, you stated (p. 11) that "we have told the agencies that they should review their principal economic indicators at least once every three years." Review of these indicators is certainly desirable, but does your statement mean that OMB's Office of Statistical Policy plays no significant role in this review? Is this because the Office lacks sufficient personnel? What role, if any, is played by outside experts in these reviews?

Section 8 of Statistical Policy Directive No. 3, published in the Federal Register of September 25, 1985, requires each agency that issues a principal Federal economic indicator to submit a performance evaluation of that indicator to the Office of Management and Budget every three years. The directive lists the issues that are to be addressed in the evaluations, including "any additional issues that the Administrator for Information and Regulatory Affairs specifies in writing to the agency at least 6 months in advance of the scheduled submission date." The directive further states that the evaluations will be reviewed by the Administrator for conformity to OMB statistical policies and standards.

The role of the Statistical Policy Office is to provide guidance to the agencies on the analyses to be included in the evaluations, to review the evaluations when they are submitted to OMB, and to work with the agencies to make any changes in data collection and estimation methods that may be indicated by the evaluations. OMB has established a schedule for the first round of evaluations during 1986-88. For economic indicators that are closely tied to particular data collections, the schedule calls for evaluations to be completed and submitted to OMB several months in advance of the date that the underlying data collection must be submitted for reapproval under the Paperwork Reduction Act. This is to give OMB time to review the evaluations and the agencies time to incorporate the results of the evaluation into their data collection plans before submitting them to OMB. In evaluating their indicators, agencies are free to seek any outside expert advice and assistance they may wish.

2. You stated on April 17 (p. 18) that an OMB study indicated that voluntary surveys "produced more useable responses than most of the mandatory programs." Please send a copy of the OMB study.

   A description of the background and purpose of the study is contained in OMB's report to Congress, Managing Federal Information Resources, Fourth Annual Report Under the Paperwork Reduction Act of 1980 (September, 1984). I am including a copy of that portion of the report as Attachment 1. In my letter responding to questions you had asked at the April 17th hearings, I enclosed a summary of the initial results from OMB's study of response rates in business surveys. A copy of this is included as Attachment 2. A further analysis of results from the business survey study will be contained in the report, Federal Statistics: A Special Analysis of the Statistical Programs and Activities of the United States Government, Fiscal Year 1987, which we expect to publish within the next few weeks.

3. The data in your testimony are based on budget obligations, not budget authority (p. 22). Please submit data using all three budgetary measures: budget authority, obligations and outlays, and compare the trends based on each measure.

   The accompanying table shows obligations, budget authority, and outlays for the same agencies and years included in the table in my testimony.

4. You stated (p. 25) that OMB's annual report on statistical programs will be available very shortly. When will this study be released? Please send a copy when it is available.

   I expect the report to be published within the next few weeks. I will be happy to send you a copy.

5. You stated (p. 25) that your data on the Bureau of Labor Statistics budget take out the transfer of the trust funds from the Employment and Training Administration (ETA) to BLS. As I understand it, exclusion of the trust funds does not take full account of the budgetary effects of the program transfers from ETA to BLS. Please provide BLS budget data which do take full account of these transfers.

   In addition to trust funds transferred to the Bureau of Labor Statistics (BLS), the 1984 Budget tranferred $5,310 thousand from the appropriation request for the Training and Employment Services account to the appropriation request for

CURRENT DOLLAR BUDGETS OF PROGRAMS RESPONSIBLE FOR PRODUCING THE MAJORITY OF ECONOMIC STATISTICS, 1980-1987

	Millions of current dollars				Percent change over period		
	1980	1985	1986	1987	1980-1985	1985-1986	1986-1987
Bureau of Labor Statistics							
Total obligations	102.9	170.6	187.2	195.9	65.8	9.7	4.6
less obligations of trust funds:							
Net obligations	102.9	150.1	152.5	159.4	45.9	1.6	4.5
Budget authority	102.9	152.9	151.8	159.4	48.6	-0.7	5.0
Outlays	106.1	141.8	157.6	159.4	33.6	11.1	1.1
Bureau of the Census (current programs)							
Net obligations	52.5	84.8	86.5	91.7	61.5	2.0	6.0
Budget authority	53.7	85.3	86.5	91.7	58.8	1.4	6.0
Outlays	55.6	84.3	86.1	91.2	51.6	2.1	5.9
National Agricultural Statistics Service							
Net obligations	51.2*	58.1	56.2	59.7	13.5*	-3.3	6.2
Budget authority	51.6*	58.3	56.2	59.7	13.0*	-3.6	6.2
Outlays	51.4*	56.5	56.6	59.1	9.9*	0.2	4.4
Bureau of Economic Analysis							
Net obligations	15.8	21.8	21.3	23.5	38.0	-2.3	10.3
Budget authority	16.0	22.1	21.3	23.5	38.1	-3.6	10.3
Outlays	14.2	26.2	20.8	23.3	84.5	-20.6	12.0

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* The National Agricultural Statistics Service, formerly the Statistical Reporting Service, did not exist as a separate agency in 1980. Figures represent 1982.

the BLS to provide for BLS administration of occupational employment statistics collection by the States. Corresponding amounts in the BLS budget for 1985-87 are:

	(thousand)
1985	$5,505
1986	5,168
1987	5,143

6. Please provide information on the number of professional personnel working on statistical policy in the Statistical Policy Office at OMB (or the Commerce Department) for each of the last ten years. If available, please provide this information in total, and with a breakdown by area of major responsibility.

As of July, 1986, the Statistical Policy Office consists of six professionals including the chief statistician. The staff complement in July of each of the years 1982 through 1985 was 5, 7, 7, and 6 respectively. In September, 1981, immediately after being transferred back to OMB from the Commerce Department, the staff consisted of 11 professionals, including three assigned full or part time to the National Indicators Project -- a series of statistical briefings for officials of the new Administration. The figures for 1981 through 1983 include two professionals working less than full time and the 1982 figure excludes the Deputy Administrator of OIRA who was acting as chief statistician at that time.

In 1978, 1979, 1980, and most of 1981, staffing and assignments were the responsibility of the Commerce Department. We do not have figures for staffing during this period. In July, 1977, the Statistical Policy Division (SPD) of OMB was preparing for the transfer of the statistical policy function to the Commerce Department. Eleven professionals were transferred to perform that function. The other professionals in SPD remained in OMB to perform Federal Reports Act functions. This staff, along with other OMB units covering information policy, regulatory policy, and special projects, formed the core staff for OIRA when it was established in 1981.

There were significant reassignments of staff responsibilities after the 1981 transfer to OMB, in 1982, and in 1984. The table below shows the number of professionals with substantial responsibilities in each area. The chief statistician, who has responsibility for all areas, is not

included. In the transition organization, seven of the nine professionals had responsibilities predominantly in one area. Since 1984, each professional has had significant responsibilities in two to four areas.

NUMBER OF PROFESSIONALS BY AREA OF RESPONSIBILITY

AREA	(1977)*	1981	1982	1984-86
Economic	2	3	3**	3
Social/Demographic	5	2**	3**	3
Environment/Natural Resources	-	1	1	2
International	1	1	-	1
Standards/Methodology	2	2	3	4
National Indicators Project	-	3**	-	-

* The 1977 column reflects the specialties of the statistical policy professionals transferred to the Commerce Department in that year.

** Includes less than full time employees.

7. You stated (p. 37) that the Commerce Department "indicated to their users for some period of time...that they had real problems with the flash GNP." What specific form did these indications take?

Since 1975, the Bureau of Economic Analysis has published in each of its releases of GNP estimates a note on the reliability of the estimates. In the period when the Flash estimate was being published, the note included an historical table showing the average and the range of revisions in the Flash as well as in the Preliminary, First revision, and Second revision GNP estimates. This served to alert users to the magnitude of past revisions in the Flash estimate. In addition, as Dr. Sidney L. Jones testified before the Joint Economic Committee on April 17, 1986, he viewed the Flash estimate as a statistic that was misleading to analysts in the private sector and favored its elimination. Dr. Jones had made these views known on a number of occasions when he was the Under Secretary of Commerce for Economic Affairs.

8. When would the flash GNP estimate for the first quarter of 1986 have been issued? On what date did the Commerce Department announce that it would not be issued? Was this at least three months prior to the scheduled issue date?

The Flash GNP estimate was included in the report of the Second revision estimate for the previous quarter. The 1986 schedule of release dates for principal economic indicators called for the Second revision estimate for the 4th quarter of 1985 to be published on March 19, 1986. The Commerce Department announced on January 29, 1986, that the Flash estimate would be discontinued.

9. You stated that the Commerce Department's elimination of the flash GNP estimate did not have to be cleared by OMB's Office of Statistical Policy because it involved elimination of a statistical report, but not of a statistical series. What other statistics or statistical reports have been eliminated since 1981? Were these reviewed by the Office of Statistical Policy prior to taking effect?

The following reports covered by Statistical Policy Directive 3 in 1981 have since been discontinued: manufacturers' export sales and orders; manufacturing capacity utilization; labor turnover in manufacturing; and work stoppages. In all cases, the discontinuations were reviewed by OMB prior to taking effect.

10. You stated (p. 53) that your would want to look at the question of making the decennial Census voluntary "very carefully." Have you looked at this issue? If so, what is your conclusion?

I have not looked into the question of making the decennial Census voluntary. Because everyone in the population is asked to respond to the decennial Census, penalties for nonresponse do not raise the same issue of fairness as they do in surveys whose coverage is incomplete or that keep the same respondents in panels for long periods. The fairness issue, along with evidence that mandatory reporting adversely affects the timeliness of response and has no positive impact on final response, are the source of our concern about proposals to expand the use of coercive authority in conducting business surveys. As I indicated in the April 17th hearings, our investigation of the connections between mandatory reporting and response has up to now been focused entirely on business surveys.

11. Your data on the BLS budget includes the periodic CPI revision (p. 65). Please submit data which excludes this periodic program and compare it with the information in your testimony. Wouldn't it be more consistent to treat the CPI revision at BLS in the same manner as the treatment of the periodic censuses of the Bureau of the Census? What is the difference?

The BLS budget includes the following amounts in fiscal years 1984-87 for the CPI revision:

	(thousand)
1984	4,483
1985	7,516
1986	13,828
1987	11,055

As I stated in the April 17th hearings, we believe it appropriate to include the budget for the CPI revision when assessing the funding of BLS statistical programs, since the CPI revision represents a major quality improvement in a major statistical series.

12. At our hearing you mentioned four responsibilities of OIRA: long-range planning, improving the performance of our statistical agencies and programs, coordination of the operation of statistical programs through budget review, and the development of statistical policy standards. What have been the major specific accomplishments of OIRA in each area in the last twelve months? What is on the agenda for the next twelve months?

OMB's statistical policy responsibilities under the Paperwork Reduction Act of 1980 are: (1) development of long-range plans to improve the performance of statistical programs, (2) coordination of statistical programs through budget review and other means, (3) establishment of policies and standards for collecting, classifying, and publishing statistics, and (4) evaluation of program and agency performance. In the past 12 months, we have:

Plans to improve the performance of statistical programs

Put in place a process for the regular evaluation of all principal economic indicators.

Assisted several agencies in the development of internal policies and legislation to protect the confidentiality of statistical data while permitting access by other agencies for statistical purposes.

Worked with the Bureau of the Census and the National Agricultural Statistics Service on the development of a plan to improve coverage on the 1987 Census of Agriculture.

With the Federal Committee on Statistical Methodology, begun studying how to improve coverage on Federal establishment and household surveys.

Coordination of statistical programs

Reviewed the 1987 budget requests of major statistical agencies.

Chaired the Federal Agency Council for the 1990 Census, which provided advice to the Census Bureau on issues to be included in the 1986 National Content Test and reviewed the NCT questionnaires.

Coordinated the funding of establishment sampling frame development and maintenance in the 1987 Budget, to assure that funds for this purpose are directed where the benefits are greatest.

Establishment of statistical policies and standards

Revised and reissued Statistical Policy Directive 3, with a new requirement for periodic evaluation of all principal Federal economic indicators.

Completed the review of proposals to revise the Standard Industrial Classification and published for public comment the recommendations of the Technical Committee on Industrial Classification for the 1987 SIC revision.

Completed a draft for internal review of a new statistical policy circular, to update OMB guidance on conducting statistical surveys, publishing statistics, and using standard statistical definitions and classifications.

Evaluation of statistical programs

Completed the first phase of a study of the business survey methods and practices of 7 agencies. The study is designed to explore the relationships between survey design, respondent burden, and the quality of data gathered and to provide a basis for evaluating agency management of the survey process.

Reviewed the plans of several hundred statistical surveys submitted to OMB for approval under the Paperwork Reduction Act.

In the next 12 months, we plan to:

Develop long-range plans for improvement in areas targeted for attention by the Economic Policy Council's Working Group on the Quality of Economic Statistics.

Pursue our work with the Bureau of the Census and the National Agricultural Statistics Service to improve the coverage and quality of the 1987 Census of Agriculture.

Publish a revised SIC Manual, to be effective January 1, 1987.

Publish an OMB statistical policy circular.

Review the 15 agency evaluations of principal economic indicators that are scheduled to be submitted to OMB between July 1, 1986, and June 30, 1987.

13. In the course of your testimony, you referred to the requirement that statistical agencies evaluate their programs and report to OIRA each year on the quality of their work. With regard to this requirement:

    A. How many statistical agencies have initiated empirical studies of the quality of their work in response to your initiative?

    B. How much money is provided in the budget of the Bureau of the Census, the Bureau of Labor Statistics, the Statistical Research Service of the Department of Agriculture, the Statistics of Income Program of the IRA, and the Bureau of Economic Anlaysis to enable them to comply with your request for periodic evaluations of the quality of their work?

My testimony referred to the requirement in Statistical Policy Directive No. 3 that agencies issuing principal economic indicators formally evaluate those indicators once every three years. Ten separate agencies or departmental units publish reports designated as prinicipal economic indicators and will be submitting evaluations to OMB during 1986-88.

No additional funding has been included in agency budgets to cover the evaluations called for in Directive 3. We believe that this sort of evaluation should be a routine part of the process of compiling and publishing statistics and should be organized so that it adds little if any cost to agency programs.

14. In your testimony you said that a major focus of your work has been examination of the concepts used in the collection of statistical information. In this regard:

    A. What concepts currently being used by statistical agencies are under review at OIRA?

B. What provision have you made for consultation with interested groups before instituting changes in statistical concepts?

C. What provision are you making for the empirical investigation of the consequences of changes in the definition of statistical concepts?

In general, it is the responsibility of the statistical agencies to institute needed changes in the concepts underlying the statistics they publish. OMB's role is to motivate the agencies to evaluate all aspects of their work on a regular basis, including the concepts underlying the statistics they publish. Inasmuch as it is an aspect of the accuracy of statistical measures, conceptual validity is an element in the evaluations called for in Statistical Policy Directive No. 3.

The Economic Policy Council Working Group on the Quality of Economic Statistics, co-chaired by OMB and the Department of Commerce, published a notice in the Federal Register of July 9, 1986, seeking public comment on the quality and usefulness of the economic statistics produced by the Federal government. The notice specifically indicated that the Working Group is interested in comments on "the extent to which existing statistical series reflect the concepts commonly used in economic analysis and provide useful estimates of these concepts." OMB and the statistical agencies will use the comments received to help identify areas where concepts need to be reviewed.

OMB is responsible for establishing standard definitions and classifications for statistical purposes, including the Standard Industrial Classification and the definitions of Metropolitan Statistical Areas (MSAs). Prior to revising MSAs and the SIC, OMB has sought public comment through the Federal Register. In carrying out the MSA and SIC revisions, OMB has had the advice and assistance of interagency expert groups (the Federal Committee on Metropolitan Statistical Areas and the Technical Committee on Industrial Classification). The agency representatives in these groups have provided empirical investigations of the consequences of proposed changes for statistical agencies and programs. In establishing the criteria for the decennial MSA revisions and in revising the SIC, OMB does not consider or attempt to anticipate nonstatistical uses that may be made of the MSA definitions or of the SIC.

15. During the course of your testimony you said:

"Very frankly, statistical facts are not facts that are there to be discovered, but they are basically estimates. They are subject to many different kinds of error" (p. 8).

In view of this statement, what activities is OIRA encouraging the statistical agencies to pursue so as to develop the information necessary to construct measures of uncertainty or error in statistical indicators? How much money has OMB alloted to the major statistical agencies for this activity?

The statistical policy circular that we are currently developing will provide guidance to agencies on publishing measures of uncertainty and error. Measuring uncertainty and error is an integral part of conducting statistical studies and should not be considered a separable budget item.

16. **What have been the major activities of the federal agency council on the 1990 census? Why has it been necessary for the Bureau of the Census to maintain consultative committees composed of federal agency representatives at the same time that OIRA has convened a federal agency council?**

The Federal Agency Council for the 1990 Census, which OMB organized and chairs, is made up of representatives appointed by the Senior Official for Information Resources Management of each department or agency that wished to participate. There are currently 19 departments or agencies represented. In 1985, the Federal Agency Council for the 1990 Census focused on identifying agency requirements for data from the census, setting priorities, providing advice to the Bureau of the Census on issues to be addressed in the 1986 National Content Test, and reviewing the NCT questionnaires. The Council is currently establishing priorities for the release of data and data products from the census. We believe that the Bureau of the Census' decision to consult with other groups was a matter of choice rather than necessity.

17. Please provide a copy of all reports issued by the Federal Committee on Statistical Methodology in the past twelve months.

A copy of Statistical Policy Working Paper 13, Federal Longitudinal Surveys is included as Attachment 3.

18. What is the status of the draft statistical policy circular on statistical methodology? Please provide a copy of the draft or (if this is not currently available) a statement of the issues under consideration in connection with the issuance of this standard.

A draft statistical policy circular is currently undergoing review within OMB. The issues addressed in it include the planning of statistical surveys, the treatment of respondents, the presentation of statistical data in publications, the documentation of data and methods, and the use of standard definitions, classifications, and data sources.

19. On April 26, 1982, your predecessor Christopher De Muth articulated some of the goals and activities of OIRA regarding statistical policy. Taking his statements as a start, I would like you to bring us up-to-date regarding the goals, activities and accomplishments of the statistical policy office.

    A. The Federal Information Locator System. In 1982, OIRA was just beginning to experiment with the Federal Information Locator System (FILS). This computer system was recommended by the Paperwork Reduction Commission and required by the Paperwork Reduction Act of 1980. Its purpose is to provide agencies, OMB, Congress and the Public with a way of finding out about surveys that the federal government is already conducting so that work is not duplicated and results are fully used. What is the current status of this system? In the past twelve months, how many Federal surveys or statistical data collections have been modified due to information found in the FILS? How can Congress and the Public gain access to the information in the system? What is the estimated cost of FILS for FY85, FY86, and FY87? How does OIRA make sure that the information in FILS is current and accurate?

The Office of Management and Budget (OMB) has an interagency agreement with the Department of Defense (DOD) whereby the DOD has the Federal Information Locator System (FILS) on a DOD computer system (DIALS). The 35 agencies OMB has identified as being obligated to use FILS have interagency agreements with DOD to cover the costs of using FILS.

OMB does not know how many surveys or collections have been modified due to FILS. The agencies query FILS when contemplating submission of an information collection request and present OMB with the final request. The agencies are under no obligation to provide OMB with information on what modification they may have made in preparing the request, and we have no information on cost-avoidance resulting from FILS inquiries.

Congress can gain access to FILS in one of two ways. if the intent is for a single query or a limited access, Congress can arrange a reimbursement to DOD for the cost of the access. if the intent is for continuous access, Congress can enter into an interagency agreement with DOD. The mechanism for public access has not been put into place at this time. The efforts to make FILS a viable, useful system have concentrated on the priorities of agency access and use the accuracy and completeness of data in the system. DOD is about to contract with a new vendor for the operation of DIALS. Once this is completed, planning for public access can proceed.

Each agency using FILS has an interagency agreement with DOD for the cost of accessing FILS. DOD maintains records on the costs of these agreements. OIRA provides DOD with a computer tape of active information collections on a periodic basis. DOD loads the tape onto DIALS and instructs the agencies to update the keywords. OIRA desk officers now also review the agencies' assignment of keywords whenever the agency submits an information collection request.

B. Standardization of definitions used in statistical operations. In light of the decentralized structure of the Federal statistical system, OIRA is charged with assuring that major concepts used by statistical agencies are compatible. In this regard, what activities are currently under way at OIRA to promote the standardization of statistical definitions? In what specific areas does incompatibility exist, and what steps has OIRA taken to reduce this?

OMB is currently completing a major revision of the Standard Industrial Classification, designed to bring this classification, whose last major revision was in 1972, better in line with the current structure of the U.S. economy. In May, 1982, OMB issued a directive establishing standard business size categories for statistical purposes.

There are several cases where agencies use different categories for publishing statistics -- for example, age and income categories. In addition, there are cases where the use of standard definitions and classifications does not assure complete standardization of categories because of differences in the way the classified units or variables are defined or coded. For example, the use of the SIC does not assure complete standardization of industry categories if different statistical agencies define coding units differently or code the same units differently. The standard business size categories do not assure complete comparability if there are differences among agencies in the definitions of the variables used to measure size. These differences are sometimes difficult to eliminate, but they can in all cases be documented, so that data users are alerted to them. The OMB directive establishing standard business size categories specifically requires such documentation. In the case of interagency differences in SIC coding, a 1984 report of the Federal Committee on Statistical Methodology contained a set of recommendations for standardizing and improving coding practices among statistical agencies. We plan to implement several of these recommendations following the 1987 SIC revision.

C. Sharing data and the protection of privacy. Agencies sometimes need to use the same material to conduct statistical operations. For example Census, BLS and SRS each conduct surveys of businesses and must compile lists of these. In this regard, what has OIRA done to promote sharing of these materials so as to reduce costs and increase the compatability of the results? How has OIRA monitored the sharing of information so as to protect the privacy of the public? What legislation, if any, is necessary to facilitate data-sharing between agencies?

In 1983, OMB drafted and circulated for agency comment a bill that would have provided uniform protection of the confidentiality of all statistical records in the Federal government and permitted the regulated sharing of data for statistical purposes among statistical agencies named in the bill. OMB has addressed the privacy implications of sharing individually identifiable personal information primarily to the extent that such sharing has been undertaken for administrative purposes. For example, in May, 1982, OMB issued revised guidelines on conducting computer matching programs. We have not separately addressed sharing of individually-identifiable data for statistical purposes. The legislation needed to facilitate data sharing would depend in large measure on what data were to be shared -- in particular, on the extent to which administrative data would be made accessible for statistical purposes. The principal body of data gathered for statistical purposes that cannot, under current law, be used for statistical purposes outside the collecting agency is data collected under Title 13 U.S.C.

D. Monitoring the cooperation between agencies with regard to so-called reimbursable projects. A substantial proportion of the work of statistical agencies is devoted to work performed under interagency agreement with other Federal agencies. OIRA is charged with monitoring this work and resolving difficulties that may arise. How many staff of OIRA are specifically assigned to work on projects that involve interagency agreements for the collection or analysis of statistical information? In the past twelve months, how many interagency agreements has OIRA facilitated?

Interagency agreements, wherein an agency that has statutory responsibility for carrying out a program contracts with another agency to carry out the program or to provide certain services in support of the program, have the advantage that the sponsor agency, in whose budget the program is funded, has control over the specifications and quality of the contractors' product or services. Normally there should be no need for OMB to become involved in such contractual relationships. OMB reviews the plans for all statistical surveys, including those conducted on a reimbursable basis; all members of the Statistical Policy staff and a number of different OIRA Desk Officers are involved in such reviews. In the past two years, OMB has actively promoted several cooperative projects involving statistical agencies of the Agriculture, Commerce, Labor, and Treasury Departments.

Attachments (3)

Attachment 1

MANAGING FEDERAL INFORMATION RESOURCES

FOURTH ANNUAL REPORT UNDER THE PAPERWORK REDUCTION ACT OF 1980

OFFICE OF MANAGEMENT AND BUDGET

SEPTEMBER 1985

The States currently play a larger role than is commonly recognized. A sizeable portion of the Federal statistical system operates along truly "federal" lines, either with the Federal government aggregating data produced by the States to generate national statistics, or with Federal and State agencies cooperating to produce national and state statistics as a joint product. These programs contrast with others in which the Federal government is the sole producer of statistical data at the national, state, and local levels. Studying the strengths and weaknesses of the two different kinds of programs should cast light on a variety of issues relating to the organization and funding of Federal statistical programs and thus is a long-term interest of OMB.

Business Survey Methods and Practices: In 1983-84, consideration of several statistical policy issues was hampered by the lack of reliable performance data on existing statistical programs. One such issue arose as the result of an agency initiative to seek expanded mandatory reporting authority for its business-sector surveys. There proved to be almost no reliable data to assess the need for or predict the efficacy of such a change in policy. In light of this, OMB last year solicited the support of statistical agency heads for a review of the current state of methods and practice in business surveys. The study was designed to enable OMB to evaluate response rates in a large cross-section of the business-sector surveys conducted by the Federal government and to investigate the relationship between the design of such surveys, the burdens they place on respondents, and the quality of responses. Moreover, inasmuch as many of the data OMB required for its study are performance data (such as response rates) that agencies could be expected to use to manage and evaluate their own survey programs, the availability of the data within each agency provided an indication of the quality of its program management.

The first step in the study was a broad examination of the data submitted by agencies in support of requests for OMB clearance of their surveys. This review of hundreds of surveys from many agencies found wide variations in their preferred survey practices, the emphasis given to particular performance measures, and the accuracy and completeness of those measures. Based on these findings, OMB designed an evaluation questionnaire to test the ability of statistical managers to provide detailed sample design and management data in a short period of time (4 to 6 weeks) and asked the Census Bureau, Bureau of Labor Statistics, Energy Information Administration, Statistical Reporting Service, Economic Research Service, Bureau of Mines, and Bureau of Economic Analysis to provide summary data for over 150 clearance packages covering more than 500 individual surveys.

The data asked for in the questionnaire included a description of the survey design, particular survey milestones, response rates achieved at critical points in the survey schedule (e.g., prior to follow-up and at the time of the first--possibly preliminary--published report), measures of respondent burden, and the type and intensity of follow-up efforts. The relatively short time frame for preparing the data was based on the premise that information actually used to manage the sampling process would be readily available and that gaps in the data would provide a rough indication of management priorities.

Except for the Census Bureau, the participating agencies were able to respond within a week or so of the target date. The data they provided indicated that measures of performance are generally consistent and fairly rigorous across agencies for censuses and well-designed probability samples. Compromise ("nonprobability") designs produced less consistent performance measures, but most agencies reported these conservatively (e.g., where response rates could not be rigorously estimated, a "lower bound" figure was reported). Again, the exception was the Census Bureau which used calculations that overstated response. The Bureau's submission stated the problem succinctly: "For some surveys, we develop and maintain well-designed probability samples, and measures of response rates would fit your definition. For other panels, we 'maintain' response rates by taking nonrespondents out of the panel and decreasing the size of the mailing."

Although these differences have made OMB's analysis more difficult, they have provided insight into the way statistical programs are managed in different agencies and have put some problems into focus. In the coming year, OMB will pursue these issues as it completes its analysis of the data.

Attachment 2

Enclosure 2 to Letter from Wendy L. Gramm to Senator Paul S. Sarbanes.

Summary of Initial Results from OMB's Study of Response Rates in Business Surveys

In late 1984, OMB solicited the cooperation of seven Federal agencies (the National Agricultural Statistics Service, the Economic Research Service, the Bureau of the Census, the Bureau of Economic Analysis, the Energy Information Administration, the Bureau of Mines, and the Bureau of Labor Statistics) in a study of their methods and practices in surveying business firms and establishments. The agencies provided OMB with information about the design, follow-up practices, and response rates in over 600 different surveys of farm and nonfarm businesses. The information constitutes a rich data base for OMB and the agencies to explore various relationships between survey design, respondent burden, and quality of response. OMB started its analysis of the data last year, focusing first on examining the relationship between the use of mandatory reporting authority to collect information and the response achieved.

The accompanying table summarizes data on the response rate experience of the seven agencies included in the study. Of these agencies, the Energy Information Administration uses mandatory authority in most of its surveys while the Commerce Department agencies (the Bureau of the Census and the Bureau of Economic Analysis) conduct both mandatory and voluntary surveys. The other agencies rely almost exclusively on voluntary data collection. The Census Bureau does a sufficient number of both so that separate summary statistics could be shown for mandatory and voluntary surveys. The first three agencies listed in the table: the Energy Information Administration, the National Agricultural Statistics Service, and the Bureau of the Census provide enough examples of different types of surveys to show separate summary statistics for censuses, probability samples, and all other designs. For each agency and type of survey, the table shows four summary statistics, explained in the Notes to the table: Average Final Response, Average Timely Response, and two Early Response Index numbers.

As the table shows, the National Agricultural Statistics Service's voluntary program scored high on both final response rate and the normalized early response index. EIA's censuses and probability surveys scored high on final response rate but much lower on the index. The Commerce Department agencies showed the lowest scores on the index. Their average performance was clearly dragged down by the slow response to mandatory surveys. The high index score for EIA's "Other surveys" reflects the effect of a few uniquely-designed "fast response" surveys. However, the National Agricultural Statistics Service achieved index scores almost as high for its entire program of voluntary surveys.

While further analysis is needed to explain them fully, two important findings have emerged from the study to date. One is that probability sampling achieves substantially higher response than less rigorous sampling methods, a result that may be explained, at least in part, by the greater attention agencies generally give each respondent in a probability survey. The other striking finding is that voluntary surveys yield higher rates of timely response than most mandatory surveys. The use of coercive authority clearly extracts a price in terms of timeliness. This may be due in part to the additional layers of review to which businesses subject their responses to assure that legal requirements have been satisfied. However, the delays in reporting are so long in some cases that they suggest a disregard by both sponsor agency and respondents for the timeliness of the information.

OMB is continuing its analysis of data in the business survey study as a basis for developing long-range plans to improve response to government surveys of the business sector and for developing government-wide policies and standards for the treatment of respondents. The analysis to date suggests strongly to us that careful attention to the design of surveys, not the threat of legal penalties, is the key to gathering accurate, timely information for statistical purposes.

RESPONSE AND RESISTANCE TO BUSINESS SURVEYS*

Agency/ Type of Survey	Number of Surveys	Average Final Response	Average Timely Response	Early Response Index	
				Per Day	Per Month
Energy Information Administration					
Censuses------	29	97	76	3.12	66
Probability Samples-----	5	93	59	1.14	24
Other---------	15	97	79	> 22	>460
National Agricultural Statistics Service					
Censuses------	56	98	same	11.06	232
Probability Samples-----	99	91	same	11.78	247
Other---------	107	63	lower	> 12	> 250
Bureau of the Census					
Censuses------	96	79	33	1.92	40
(Major censuses only)-------	(9)	(82)	(43)	(1)	(22)
Probability Samples-----	42	85	47	2.75	58
Other---------	22	80	47	1.89	40
Mandatory-----	99	83	35	1.63	34
Voluntary-----	61	79	44	3.01	63
Bureau of Labor Statistics					
Mean	24	84	68	2.36	49
Median		85	67		
Bureau of Economic Analysis					
Mean	29	80	53	1.21	25
Median		85	50		
Economic Research Service					
Mean	13	73	55	2.45	51
Median		82	60		
Bureau of Mines					
Mean	109	85	64	2.71	57
Median		93	73		

*Results originally presented to the American Statistical Association, August, 1985.

NOTES

The seven agencies are listed in two groups. The first three provided enough examples to break out censuses, probability samples, and all other designs. The last four provide fewer examples or examples of only one type of design. In these cases, where survey types are not broken out, median as well as mean values are displayed. Within each group, agencies are listed in order of increasing variance for the "Final Response" variable. If all agencies were listed in variance order, the order for Census and BLS would be reversed.

Number of Surveys: a count of the surveys reflected in the average final response for each category. Estimates of timely response and the early response index reflect the same or smaller number of surveys for which such data were reported. Small numbers, e.g. EIA probability samples, imply less reliable averages.

Average Final Response: mean of reported (percent) values with some adjustments derived from "comments" provided by agencies. Most values in the "Other" categories are conservative estimates (some out-of-scope counted as nonresponse). However, Census "Other" and small censuses show overstated rates caused by the elimination of persistent non-respondents from the surveys and hence from the response rate calculations.

Average Timely Response: percent response achieved prior to follow-up (on or soon after the "requested response date") except for the National Agricultural Statistics Service (NASS) which sets final cutoffs that are shorter than the follow-up dates in most agencies. This measures the level of cooperation achieved without the expense and program delays entailed in follow-up. With few exceptions the final cutoffs and response rates reported by NASS were equivalent to the values reported by other agencies for timely response.

Early Response Index: timely response rates divided by the number of working days between the end of the reference period (ERP) and the date by which that response rate is achieved ("per month" index is then "per day" x 21). This index adjusts for the large differences in timeliness requirements on the premise that rapid response reflects a higher degree of cooperation by the respondent (or conversely that an early cutoff - as in NASS - may truncate response). Average index values preceded by a "greater than" symbol reflect highly skewed observations where individual surveys varied considerably around the mean value.

Types of Surveys: Censuses are essentially-complete enumerations of a well-defined population (small censuses enumerate all businesses in a narrow class of economic activity). Probability surveys are any of a variety of designs with selection based rigorously on probability theory. Other surveys are generally compromise designs that are based neither on complete enumeration or probability theory -- some surveys planned as censuses were reported in this category when they failed to achieve adequate coverage.

Attachment 3

Statistical Policy
Working Paper 13

Federal Longitudinal Surveys

Prepared by
Subcommittee on Federal Longitudinal Surveys
Federal Committee on Statistical Methodology

Statistical Policy Office
Office of Information and Regulatory Affairs
Office of Management and Budget

May 1986

Editor's Note.--The full text of Attachment 3 may be found in the committee's files.

[A 5-minute recess was taken at this point.]

Senator **Sarbanes**. The committee will resume.

I apologize to the panel about the vote, but I have no control over that. And the initial witness took longer than I thought would be the case when we started out this morning.

The panel composition is James T. Bonnen, professor of economics, Michigan State University, and former chairman of the Reorganization Project for the Federal Statistical System; Sidney Jones, who is now at Brookings, but from 1983 to 1985 was Under Secretary of Commerce for Economic Affairs and before that has had a very distinguished career in Government service; Thomas Juster, director of the Institute for Social Research, University of Michigan, and chairman of the Committee on Statistics of the AEA; and Martha Farnsworth Riche, the editor of American Demographics magazine.

Mr. Jones, I understand that you, in particular, have a time problem or speech you have to give later.

Mr. **Jones**. 2 p.m., sir.

Senator **Sarbanes**. Perhaps we should go ahead with your testimony first, if that doesn't create a time problem for anyone else. And, I think what we will do is go through the panel and hear your statements. Then there may be some questions and hopefully we can conclude at a reasonable time.

STATEMENT OF SIDNEY L. JONES, ASSOCIATE FACULTY, CENTER FOR PUBLIC POLICY EDUCATION, THE BROOKINGS INSTITUTION

Mr. **Jones**. Thank you, sir. I will submit, as usual, the prepared statement for the record and will only cite the 10 or 12 major recommendations that I would like to make.

The first recommendation is that we should recognize that the Federal Government is responsible for creating and operating the Nation's core information system. This authority and responsibility cannot be delegated as a commercial function to the private sector.

The second point I would make was dealt with extensively in the 2-hour discussion this morning. And that is that I believe a more powerful coordinating agency is needed to plan and direct the entire statistical system.

The Office of Statistical Policy was originally a powerful institution with a large professional staff capable of fulfilling oversight responsibilities. Over time, however, its size and institutional clout have declined to a point where its small staff now provides little direction and coordination beyond reviewing proposed forms and reports and response to claims of private individuals and companies. I made some specific recommendations as to organizational framework in my prepared statement.

My third recommendation is the one which you graciously quoted this morning. That is that the policy environment for statistics should be changed from one in which statistics are considered to be an unfortunate reporting burden upon respondents requiring the diversion of budget resources away from other Government spending programs.

The core statistic programs must be given a new status, which properly recognizes the value of information as the necessary foundation for making wise policy decisions, or, at least, informed policy decisions.

I then go on to quote the experience of trying to get private companies to participate in the survey of capital expenditures. This figure, which was reported this morning is of crucial importance to making macroeconomic policy. I discovered at that time that only two-thirds of the Fortune 500 and Fortune 500 service companies were on a voluntary basis participating in that survey.

I then quote the response of one of America's leading corporations, where they graciously refused to cooperate, and emphasized that they would not participate in any survey or report which is voluntary.

My experience was, increasingly we were having serious difficulty in collecting information on a voluntary basis.

My fourth recommendation is that we should have a more formalized system for evaluating statistical programs as to their relevance to policy decisions and their relative cost benefit status.

It is true that there are various professional agencies, the Office of Statistical Policy at OMB, the budget process itself, the General Accounting Office, and various committees of Congress that do exercise oversight reviews. But I do not believe it is comprehensive or particularly organized.

My fifth recommendation is that increased emphasis should be placed on requiring existing statistical agencies to fulfill specific responsibilities within the overall information system, rather than simply responding to current functional priorities of their parent organizations.

Obviously, if you are a statistical agency within the Department of Commerce or the Department of Labor, you are under severe pressure to respond to their particular management operating priorities. Those are not always consistent with, or as important in my mind, at least, as the overall information system priorities.

My sixth recommendation is that the statistical programs must always be carefully insulated from external political forces.

My seventh recommendation is that the analysis and interpretation of statistical reports should be carefully separated from the data collection process.

This is an unpopular suggestion among our statistical agencies, of course, because the analysis and interpretation is much more exciting than simply crunching the numbers. But, I believe we get into trouble when the professional is expected to cast an interpretation on his results.

Eighth, and I feel very strongly about this one. Congress should mandate severe penalties for the unauthorized release of statistics and analytical reports prior to their official publication schedules.

Let me cite some more detail on this one. Despite all the efforts to preserve the confidential status of statistics and analytical reports, there are continuous leaks of information to other government officials, media reporters and private interest groups.

It is customary to dismiss these violations with trite excuses that everyone enjoys insider gossip and that such leaks are merely a normal part of the rules of the game.

In reality, the improper release and use of confidential information has direct and instantaneous effects upon billions of dollars of financial trades in stock and bond markets, futures and commodity markets, and international foreign exchange markets.

The potential for financial scandals is far greater than the usual reports of government contracting abuses and routine political intrigues. The financial markets often swing widely when new statistics are released, no matter how preliminary or tentative the signals may be.

Insider information creates a comparative advantage for a privileged group while the general public is mistreated.

Extensive precautions have been developed to protect the preparation and release of statistics, but disappointing experiences still occur, and the overall credibility of the entire system has been questioned.

An obvious solution would be to totally insulate the process from external contacts—both government officials and private interest groups—prior to the public release of the information to everyone, and then provide official authority and responsibility to the Justice Department to hunt down and punish unauthorized leaks.

My ninth recommendation is that statistical budgets should be increased and consolidated. That is a difficult recommendation during the period of budget constraints but the current process will not save much money, but it will erode the quality of statistics.

My tenth recommendation is that a core set of statistics should be emphasized, and historical continuity and compatibility should be improved.

My eleventh recommendation is that the compression of data collection and publication schedules should be reconsidered.

Speaking to the issue of this morning, it is my personal view that the Flash GNP, as to substance, was a statistic which was not creating good analysis or correct interpretation in the private sector, and I personally favored the elimination of it.

My final recommendation is that much greater emphasis should be placed on the quantity and quality of international economic statistics, because we are increasingly participating in an integrated world.

I welcome the subject of these hearings. I know of few subjects within government which are more important than gathering information with which we judge policy and make policy.

Thank you very much.

Senator **Sarbanes**. Thank you very much, and thank you for a very complete and thoughtful statement, which will be included in its entirety.

We appreciate it very much.

[The prepared statement of Mr. Jones follows:]

PREPARED STATEMENT OF SIDNEY L. JONES

THE STATUS OF FEDERAL ECONOMIC STATISTICS

An idealized description of Federal economic statistics would claim that they provide an accurate historical record and useful evidence and guidance for public and private policy decisions. Although good statistics do not automatically produce good policies, the availability of adequate background information is often a crucial variable in the leadership process. A more cynical version would emphasize the Catch - 22 dilemma of having "tons of information but ounces of analysis" suggesting that leaders often have access to lots of irrelevant statistics but cannot obtain the specific information needed, at least at a reasonable cost. I rank the Federal economic statistics programs somewhere between the two extreme positions, but clearly on the positive side of the spectrum. The United States has developed a sophisticated set of national statistics, with good breadth and depth of coverage, and relatively current availability. The statistics and analytical reports produced are regularly used for important government policy decisions and throughout the decentralized private economy. The 1985 statistical outlays of approximately $1.5 billion were an infinitesimal part of the $946 billion Federal budget, particularly when the problems of trying to measure and analyze the activities of a $4 trillion domestic economy and participation in the world economy are properly recognized. The functional independence of major statistical agencies has been effectively insulated from manipulation by the Executive Office and Congress. Most of the basic statistics have survived the recent budgetary constraints and an experienced cadre of professional employees has been preserved despite the frustrations of government service. There are many reasons to be grateful for the overall quantity and quality of Federal economic statistics.

Nevertheless, there is an underlying attitude of dissatisfaction and uncertainty concerning the operating and budgetary status of Federal economic statistics. Worst of all, there is a suspicion that the overall status is now slipping and that the same quantity and quality of statistics and analytical reports will no longer be readily available. Part of this uneasiness involves the annual budget pressures and the ominous prospects for statistical functions if the across-the-board formula cuts required by the mechanical application of the Gramm-Rudman-Hollings legislation are actually enforced. But an even more significant factor is the growing recognition of the gap between unrealistic expectations and the actual capabilities of the statistical agencies. These agencies are now trying to measure and describe the activities of an increasingly complex domestic economy with extremely limited staff and financial resources. The characteristics of the economy are rapidly changing making the existing data collection and processing systems obsolete. The rapid integration of the world economy has changed our statistical needs and sources of information. The time frames for collecting and publishing statistics have been unrealistically compressed. Government officials are naively trying to micro-manage specific issues using general statistics collected for other purposes. Policy issues increasingly require cross-cutting solutions which do not match traditional statistical categories. Private individuals and companies are refusing to cooperate with statistical surveys and censuses unless they are mandatory because of the time and expense involved in responding at the same time that staff budget cuts are spreading throughout the private economy. It is difficult to maintain the credibility of statistics and reports when political officials continuously manipulate the interpretation of results to serve their personal interests or conveniently ignore available information in developing public policies. The massive revisions in published statistics have eroded confidence in the usefulness of government reports. Growing skepticism has also developed as government officials continue to leak confidential statistical information to preferred interest groups. Even the most prestigious government institutions appear to be leaking like a sieve, and responsible officials simply rationalize the problem by arguing that they are only trying to be helpful and responsive to the media and private interest groups. In short, we seem to have a situation in which the overall structure of Federal economic statistics is still in place and functioning relatively well, but a number of serious procedural, budget, and management problems have combined to erode the traditional level of confidence.

The following review of suggested reforms is based on my personal experiences during the last sixteen years in working with some of the major statistical agencies. It is obvious that many of the suggestions are contrary to established institutional interests and are probably impossible given the budgetary constraints likely to be enforced throughout the staff functions of the government, but this brief list of concerns may provide a useful beginning point for evaluating the status of Federal economic statistics.

1. **Recognize that the Federal Government is responsible for creating and operating the Nation's core information system.** This authority and responsibility cannot be delegated as a commercial function to the private sector. The Federal Government should gather, compile, publish, revise, and preserve the core statistics necessary to create a comprehensive, logical, objective, and continuous information system. Individual government agencies, academic institutions, trade and professional associations, and private companies do not have the data collection authority or capabilities to perform this important function, even though they are the actual sources of much of the information collected and they naturally develop many specific statistics and analytical reports.

2. **A powerful coordinating agency is needed to plan and direct the entire Federal statistical system.** There are now approximately 70 different Federal organizations involved in various statistical activities. This fragmentation makes it difficult to identify the optimum scope and priorities needed to develop a core set of statistics. Individual organizations naturally develop their own priorities and respond to the specific policy goals of the parent departments they are assigned to serve. The central planning and coordination functions of setting standards, publication schedules, user representation, mandatory clearance of forms and reports, and control of reporting burdens created by statistical programs are currently assigned to the Office of Statistical Policy located in the Office of Management and Budget (OMB). The Office of Statistical Policy was originally a powerful institution with a large professional staff capable of fulfilling oversight responsibilities. Over time, however, its size and institutional clout have declined to the point where its small staff now provides little direction or coordination beyond the reviewing of proposed forms and reports and responding to the complaints of private individuals and companies concerning unwanted reporting obligations.

The Bonnen Report, prepared in 1977 by an inter-agency task force of government statisticians, attempted to reverse the long-term fragmentation trends by recommending the creation of a new Office of Statistical Policy with expanded powers to be located in the Executive Office independent of OMB. The report further recommended that the organization be expanded to a staff of 40 professionals led by a Chief Statistician appointed by the President and confirmed by the Senate. It was proposed that the Chief Statistician and the career staff officials would actively plan and coordinate the overall Federal programs and maintain close operating contacts with the individual statistical agencies. This thoughtful recommendation was not accepted and the subsequent Paperwork Reduction Act of 1980 simply returned the Office of Statistical Policy from the Department of Commerce back to OMB and left it with limited resources and functions.

The absence of a central directing group responsible for creating a vision of the Federal information system with the authority to provide effective coordination creates serious problems for the leaders of statistical agencies. There is no effective forum for discussing mutual problems and procedures. Worst of all, there is no process for initiating new priorities and achieving economies of scale and scope through cooperative programs. The political process simply responds to individual interest groups with the most access to power leading to fragmented statistical programs.

The creation of an independent Office of Statistical Policy would be a useful step and would provide more focus to current programs. My personal preference would be to form a Council of Statistical Advisers comparable to the existing Council of Economic Advisers. Members would be appointed by the President and confirmed by the Senate to serve 14 - year terms providing the professional independence needed to sustain leadership. Such a council would provide a focal point for the diversified statistical policy interests.

An even more revolutionary step would involve the actual consolidation of the major statistical agencies into a single independent agency comparable to the central bureaus in Canada and some European governments. I personally support this consolidation approach as a means of creating economies of scale and scope in the professional functions and enhancing the bureaucratic importance of statistical functions. I also believe that it would further improve the necessary insulation of statistical activities from external political and department management pressures. Despite these alleged advantages, there is no realistic hope that a central statistical agency will be created during the forseeable future. There is no active support for such a consolidation but there is active opposition from the statistical agencies, the parent departments in the Executive Branch, various oversight committees in the Congress, and various special interest groups. Because it is very unlikely that we will consolidate the existing statistical agencies, a useful step at this time would be to create a powerful coordinating office with an independent status.

3. **The policy environment for statistics should be changed from one in which statistics are considered to be an unfortunate reporting burden upon respondents requiring the diversion of budget resources away from other government spending programs. The core statistics programs must be given a new status which properly recognizes the value of information as the necessary foundation for making wise policy decisions or, at least, informed policy decisions.** The collection of statistics is not easy or costless. Respondents must commit valuable resources to providing the information requested. In an era of tight budgets and general animosity toward government intervention in personal and company activities, it is only natural that respondents increasingly object to the surveys and censuses of statistical agencies. The benefits of participation are diffused and difficult to identify but the costs are explicit and resented. The inevitable result is that the statistical agencies have very serious problems in collecting even the core statistics. For example, in 1985 I arranged to send a personal letter to 350 companies on the Fortune 500 and Fortune Service 500 lists urging them to participate in the survey of anticipated plant and equipment expenditures. The results of this voluntary survey are extremely important in developing macro economic policies and in the development of the National Income and Product Accounts. Despite the great significance of this

information, only two-thirds of the membership of Fortune's two basic lists participated in the 1984 survey. The response from one of America's leading companies is representative of the growing data collection problem:

> Like much of American industry, we are making intense efforts to maximize our productivity and control our costs and expenses wherever possible. At considerable cost, we presently provide the Commerce Department with significant amounts of information through various mandatory forms and filings which the Department requires. We believe that this information should be sufficient to meet the Department's needs and we are not in a position to divert additional resources and funds beyond what is necessary to provide information which is not mandated. Therefore, we must respectfully decline your invitation to participate in the Plant and Equipment Survey, as well as other surveys and reports of a voluntary nature.

The refusal of individuals and companies to participate in voluntary surveys is predictable and understandable. But there is no alternative to reporting burdens other than forcing statistical agencies to impute values or try to gain the authority needed to make the reports mandatory. One solution would be to make all statistical reports mandatory and then reimburse respondents for the costs. This approach would greatly increase the costs of gathering even the most basic statistics, but it would be a more realistic approach than the current procedures. If we are really serious about the quality and quantity of Federal economic statistics we are going to have to commit more resources to their collection and analysis. If we are unwilling to make the necessary commitments, then we should all stop complaining about the problems. It is ironic that the increasing importance and complexity of government policy decisions actually require more and better information services rather than the pervasive curtailment of statistical programs.

4. Existing statistical programs should be constantly evaluated to determine their relevance to policy decisions and relative cost benefit status. A formal evaluation system should be established to rank statistical priorities and estimate relative costs and benefits. Existing programs are rarely evaluated beyond the annual budgetary review of expenditures. Users of government statistics and those asked to submit information should have better access to express their interests and frustrations. Most statistical agencies do have professional advisory groups and outreach programs to users and participants, but the scope of program evaluations is typically perfunctory and procedures and priorities are usually accepted. The Office of Statistical Policy at OMB, departmental administration and budget officials, the General Accounting Office, and various committees of Congress also attempt to provide oversight reviews, but there is no effective way to evaluate the entire system or respond to the users and suppliers of information. The growing problem of non-participation in voluntary statistical programs is a clear signal that reforms are necessary. A central coordinating authority could contribute to more rigorous evaluations and improved communication.

5. Increased emphasis should be placed on requiring existing statistical agencies to fulfill specific responsibilities within the overall information system, rather than simply responding to the current functional priorities of their parent organizations. Administrative and budget officials naturally assume that statistical agencies should concentrate on serving the specific missions of the parent departments. For example, the leaders of the Department of Commerce expect the Bureau of the Census and Bureau of Economic Analysis to provide statistics and analytical reports needed to promote domestic and international trade and investment. As program priorities and economic conditions change, senior officials naturally assume that statistical agencies can and will adapt their services. Department budget and personnel decisions reflect these shifting priorities and operating managers under pressures to produce immediate results sometimes become frustrated with the lack of response from technical statistical staffs. Statistics and reports should, of course, be relevant to changing policies and conditions. But they must also respond to legal mandates and produce the historical time series which comprise the overall information system. Managers of statistical agencies also have intense personnel and financial resource limitations. The fragmentation of statistical functions tends to emphasize the power of operating managers in establishing short-term priorities. A better understanding of the long-term scope and importance of a Federal statistical program would improve the balance of power during such debates.

6. **The statistical programs should be carefully insulated from external political forces.** The overwhelming importance of daily statistics in shaping political events creates a tremendous temptation to try to manipulate statistics to gain a comparative advantage. The major defense against unfair pressure, of course, is the professional quality and institutional pride of the statistical agencies. I have great respect for the integrity of the people I have worked with--both the professional staff people and senior political appointees. There is a dedication to preparing and publishing statistics and reports with absolute care and integrity. This effort is generally successful but there are constant risks and it is difficult to overcome the cynicism that has accumulated. It is extremely important that the technical work be done by career professionals and that the few political appointees involved serve as a buffer to protect the career people from outside pressures and to make certain that normal procedures are always followed. The political appointee must demonstrate an absolute commitment to the integrity of the statistics and be willing to suffer the personal consequences if external political pressures develop.

7. **The analysis and interpretation of statistical reports should be carefully separated from the data collection process.** This controversial suggestion will always be unpopular because the analysis and interpretation functions are considered to be more interesting and relevant to the development of policies than merely "crunching the numbers." It is a fundamental requirement, however, to preserve the objectivity and integrity of the statistics and analytical reports. The analysis and interpretation functions require personal value judgments and sensitivity to policy interests of parent organizations. The arbitrary separation of responsibilities protects the career staff from accusations of personal bias and political manipulation. Senior governemnt officials and private interest groups will always provide plenty of analysis and interpretation, so it is unnecessary and risky for the professional staff to become involved. The preparation of accurate and timely statistics is enough of a challenge without taking on the additional burdens of analysis and interpretation beyond technical explanations of how the statistics are prepared and any unusual factors affecting the results. One exception to this rule would be to increase the exchange of information and services among the statistical agencies. The prevailing fragmentation of statistical functions has created artificial barriers to the sharing of data, survey sample lists, technical procedures, and budget resources. Many specific proposals have been made to improve internal cooperation, but the absence of a powerful coordinating organization has delayed or prevented most reforms.

8. **The Congress should mandate severe penalties for the unauthorized release of statistics and analytical reports prior to official publication schedules.** Despite all of the efforts to preserve the confidential status of statistics and analytical reports, there are continuous leaks of information to other government officials, media

reporters, and private interest groups. It is customary to dismiss these violations with trite excuses that everyone enjoys insider gossip and such leaks are merely a normal part of the "rules of the game." In reality, the improper release and use of confidential information has direct and instantaneous effects upon billions of dollars of financial trades in stock and bond markets, futures and commodity markets, and international foreign exchange markets. The potential for financial scandals is far greater than the usual reports of government contracting abuses and routine political intrigues. The financial markets often swing widely when new statistics are released, no matter how preliminary or tentative the signals may be. Insider information creates a comparative advantage for a privileged group while the general public is mistreated. Extensive precautions have been developed to protect the preparation and release of statistics, but disappointing experiences still occur and the overall credibility of the entire system has been questioned. An obvious solution would be to insulate the process from external contacts--both government officials and private interest groups--prior to the public release of the information to everyone and then provide official authority and responsibility to the Justice Department to hunt down and punish unauthorized leaks. If we are unwilling to take strong remedial actions, then information will continue to leak out providing economic and political benefits to privileged insiders.

9. Statistical budgets should be increased and consolidated. There is an obvious element of favoritism, even hypocrisy, in arguing that the budgets for statistical agencies should be increased in this era of alleged fiscal restraint. The Federal budget has reported a deficit in 24 of the last 25 years. Total outlays have risen from $591 billion in Fiscal Year 1980 to $946 billion in Fiscal Year 1985, an increase of 60 percent during the last five years, and the current services budget deficits will likely remain at the $200 billion level for the forseeable future if fundamental fiscal actions continue to be ignored. In the context of the across-the-board formula cuts mandated by the recent Gramm-Rudman-Hollings bill, it is unlikely that the fragmented budget requests of individual statistical agencies will be favorably reviewed. A more likely outcome will be continued personnel hiring freezes, perpetuation of existing programs with gradual erosion of the quantity and quality of major statistics and elimination of minor statistics, and reduction of programs for improving technical procedures and quality control. Part of this deterioration will result from the isolated staff status of most statistical agencies located in large departments responsible for directing mandated operating programs. It is always easier to cut staff activities to avoid the protests of operating program officials and beneficiaries. The relatively inferior status of statistical groups in most departments puts them on the defensive in budget priority debates. A second problem resulting from the fragmentation of statistical functions is that the budget review process concentrates on specific statistical reports rather than an overview of the entire Federal information system. Budget examiners are usually more sensitive to spending programs involving thousands or millions of participants than they are to the routine statistical programs used to collect and analyze information. The irony is, of course, that government officials will be unable to determine the relevant costs and benefits of operating programs unless statistics are collected. Reducing statistical budgets will save very little money and erode the benchmarks needed to plan, coordinate, and evaluate government policies.

10. A core set of statistics should be emphasized and historical continuity and compatibility should be improved. The scope and pace of changes in our complex economy make it difficult to adjust statistical programs quickly enough to maintain relevance to current events and policy debates. This reality should be recognized and a clear delineation of priorities should identify the core set of statistics required for a permanent record as distinguished from temporary needs. Increased effort should be committed to weeding out statistics and analytical reports through "sunset provisions" and internal and external auditing reviews. By carefully identifying two distinct categories--a permanent core set and an ad hoc temporary group of statistics linked to current events and policy debates--we could really reduce the reporting burden while continuing to protect the permanent core of statistics. Many of our current statistics and reports simply reflect the organizational inertia that perpetuates a function once started. The agencies responsible for preparing statistics and reports will obviously avoid sacrificing existing personnel and functions, so a central review process will be needed. The rationale for such reviews should go beyond the budgetary approach of simply looking for cost savings to identify ways to make the Federal statistics system more logical and compatible despite the fragmented status of the individual agencies.

11. **The compression of data collection and publication schedules should be reconsidered.** The drive for current information and predictions of the future has placed tremendous pressure on the statistical agencies to accelerate the publication of statistics and analytical reports. Preliminary releases often provide useful signals about turning points and the general nature of future events even though subsequent reports usually revise the early estimates. The preliminary estimates are "close enough" for many users and the subsequent revisions can be ignored. I believe, however, that the tradeoff between immediacy and completeness has moved too far toward emphasizing preliminary reports. The statistical agencies too often try to make preliminary estimates of what will not happen rather than

concentrating more on describing what did happen. The professional prestige and technical expertise of the government statisticians create a false sense of credibility for the preliminary releases leading to confusion when large revisions are repeatedly issued. Waiting a few more days, or even a few more weeks, to obtain more complete information will normally not reduce the general usefulness of a statistic. For example, the wise decision by the Department of Commerce to eliminate the "flash GNP," which was formerly published about 15 days before the actual completion of the relevant quarter and based on extremely preliminary information, will not restrict the development of economic policies or impair the realistic analysis of current events. The recent debacle in trying to prepare monthly merchandise trade statistics based on hopelessly incomplete information is another classic example of the significant quality improvements that can be achieved by waiting just one additional month to adjust to the limitations of the data collection system. The preliminary gross national product estimates prepared in recent quarters have been seriously warped by the monthly trade statistic problems. Trying to slow down the publication schedule will create serious protests and dire warnings about sailing in unfamiliar seas, but I believe that the current schedules are creating unnecessary confusion and skepticism among policy officials and the general public. We are now asking the major statistical agencies to do more than their existing sampling methodologies and estimating procedures can realistically justify, which leads to false expectations and unnecessary frustrations. It is equally important that the professional statistical agencies avoid making short-term forecasts, despite the exhilarating attention given by policy officials and the general public to such forecasts. Once again, the statistical agencies should concentrate on the challenging assignment of trying to describe what has already happened. Any published projections should be limited to long-term trends and environmental factors so that current events and policy issues can be avoided. There are plenty of policy and operating officials available to make short-term forecasts.

12. The quantity and quality of international economic statistics should be increased. The accelerating integration of the world economy is probably the most significant economic development of the 1980's. International trade, investment, financial transactions, access to raw materials, diffusion of technology, official financial assistance, and the role of multinational institutions have become more important. The statistical system created several decades ago was designed to measure the dominant domestic activities. Some adjustments have been made to expand the coverage of foreign trade and investment, but the scope and detail of information available lag far behind the rapid evolution of changing international transactions. There is widespread concern that the necessary statistics and analytical reports are not available to guide business decisions and develop government policies. The data collection and analysis problems are often more complex and the degree of private and public institutional support is generally inadequate because too many officials fail to recognize the crucial importance of foreign trade and investment activities within the total U. S. economy.

The preceding analysis attempts to identify a few specific issues requiring attention to improve the status of Federal economic statistics. The United States is fortunate to have a sophisticated statistical system in place. The professional people in the statistical agencies are competent and dedicated. The organizational and budgetary problems, however, are becoming more difficult to overcome each year and it is crucial that increased attention be given to basic reforms. Decisions made by government and private officials will be directly influenced by the quantity and quality of Federal economic statistics available in the future.

SIDNEY L. JONES

On November 1, 1985 Sidney L. Jones resigned as the Under Secretary for Economic Affairs at the United States Department of Commerce. Prior to September 1983 he was a Resident Scholar at the American Enterprise Institute for Public Policy Research, a Professorial Lecturer at Georgetown University, and Visiting Professor at Dartmouth College. He was formerly Assistant Secretary of the Treasury for Economic Policy. He graduated from Utah State University and received MBA and Ph.D. degrees from Stanford University. He became an Assistant Professor of Finance at Northwestern University in 1960 and an Associate Professor in 1964. In 1965 he joined the faculty of the University of Michigan and was named a Professor of Finance in 1968. In 1969 he became a Senior Staff Economist and Special Assistant to the Chairman of the President's Council of Economic Advisers. He was appointed U.S. Minister-Counselor for Economic Affairs to NATO in 1972 and Assistant Secretary of Commerce for Economic Affairs in 1973. In 1974 he was named Deputy Assistant to the President and Deputy to the Counselor for Economic Policy to the President. From 1975 to 1977 he served as Assistant Secretary of the Treasury for Economic Policy. Dr. Jones was also Assistant to the Board of Governors of the Federal Reserve System. After leaving government service in 1977, he became a Fellow at the Woodrow Wilson International Center for Scholars, a research subsidiary of the Smithsonian Institution. He lives in Potomac, Maryland with his wife Marlene; they have five children.

Current:

Associate Faculty, Center For Public Policy Education, The Brookings Institution.

Professorial Lecturer, School of Business, Georgetown University.

Fall of 1986- Visiting Tsanoff Professor at the Jesse H. Jones Graduate School of Administration, Rice University.

Senator **Sarbanes**. Ms. Riche, perhaps we will hear from you next, unless the panel has worked out an order amongst themselves.

STATEMENT OF MARTHA FARNSWORTH RICHE, SENIOR EDITOR, AMERICAN DEMOGRAPHICS MAGAZINE, AND EDITOR, NUMBERS NEWS

Ms. **Riche**. I would like to correct the record. I am not the editor of American Demographics. I am senior editor of American Demographics and I'm editor of a newsletter called the Numbers News, which covers both private and public business statistics.

I have submitted a prepared statement, and for the moment, in the interests of time I would like to make two points.

First, I would like to call attention to the employment report that was brought to the attention of this committee by Janet Norwood this month. She reported that in March nearly 10 million more Americans had jobs than did in November 1982, which was the trough of the recession.

American business created those jobs with information. New businesses and new products are created and successfully marketed every day in this country because people identify opportunities and choose to develop them. And they measure those opportunities with information.

Every entrepreneur knows the Wall Street Journal's message: Information is the fuel of the American dream.

Business people everywhere need timely, accurate information in the form of statistics, and they need it to make decisions about what product to make, where to make it, how much to make, and where to advertise and sell it.

And I want to emphasize this. Business provides much of its own information through company records, surveys or information companies like Dow Jones. But only the Federal Government can provide the comprehensive nationwide set of statistics on which all surveys are benchmarked, and out of which all private sector data bases grow.

For example, the Bureau of the Census, which is a statistics-gathering agency of outstanding integrity, has collected data in a huge 55,000-household survey every month for more than three decades. Each survey respondent receives a pledge of total confidentiality under title XIII which has never been broken.

No private surveyor can make a pledge of confidentiality backed by a Federal statute. And no individual company can afford to survey 55,000 households every month. Any company that did that would not share its results, except for a very high fee.

The Census Bureau, on the other hand, collects that data so the Bureau of Labor Statistics can measure unemployment and in so doing it makes the very useful results available at a price any business can pay.

I would like to make this point very clearly. Federal statistical agencies provide an information infrastructure that business cannot provide for itself. First, they gather comprehensive, nationwide, and in some cases worldwide information. Second, they gather data in a uniform, unbiased, statistically consistent manner.

And third, they provide the information they gather in easy-to-understand format and at a price everyone can afford.

I have made a number of recommendations, and they certainly follow along with Sidney Jones' recommendations. I would like to particularly focus on the recommendation for statistical coordination, based on the work that Jim Bonnen did so very usefully 6 or 7 years ago, that we all heartily, I think, endorse.

And, I would like to move one step beyond that to something that came out of this morning's conversations. And that is, beyond coordination, there is a need for leadership in statistics.

Ms. Gramm mentioned a number of efforts that were underway in various parts of the Federal Government, such as efforts to define service industries better so that they can be measured. We all know about the problem with data for service industries.

Those efforts have been going on for many years. I was an economist with the Bureau of Labor Statistics 20 years ago when those efforts were undertaken. But, there has not been the leadership to encourage agencies to put more effort into areas of need, and I think that is the most useful function this committee could perform.

Thank you.

Senator SARBANES. Thank you very much. We will include your entire prepared statement in the record.

[The prepared statement of Ms. Riche follows:]

PREPARED STATEMENT OF MARTHA FARNSWORTH RICHE

Just over three years ago, at the bottom of the last recession, nearly 11 percent of our labor force was out of work. Some people said there was no way the economy was going to find jobs for all those factory workers suddenly out on the streets, let alone continue to absorb the millions of baby boomers who had been flooding the labor force for the last decade.

The American economy again proved the doomsayers wrong. Unemployment has dropped more than 3 percentage points and nearly 10 million more Americans have jobs now than did in November 1982--the trough of the recession. Many of these new workers have work because American business people have developed new products and new services in response to consumer demands.

How have they been able to do it? With information. New businesses and new products are created and successfully marketed every day in this country because people identify big opportunities and choose to develop them. And how do they measure those opportunities? With information. Every entrepreneur knows the Wall Street Journal's message: Information is the fuel of the American dream.

Business people everywhere need timely, accurate information in the form of statistics, and they need it to make decisions--decisions about what product to make, where to make it, how much of it to make, and where to advertise and sell it. Business provides much of its own information, through company records, through survey research, or through information companies like Dow Jones, Dun and Bradstreet, or McGraw-Hill.

But only the federal government can provide the comprehensive, nationwide set of statistics on which all surveys are benchmarked and out of which all private sector databases grow. For example, the Bureau of the Census, a statistics gathering agency of outstanding integrity, has collected data in a huge 55,000-household survey every month for more than three decades. Each survey respondent receives a pledge of total confidentiality under Title 13 which has never been broken.

No private sector surveyor can make a pledge ~~of~~ confidentiality backed by a federal statute. Besides, no company could afford to survey 55,000 households every month without charging a fortune for the results. The Census Bureau, on the other hand, makes them available within six months of the survey at a price any business can pay--only $100.

This, then, is the mission of the federal statistical agencies--the Bureau of the Census, the Bureau of Labor Statistics, the Bureau of Economic Analysis, Center for Education Statistics, and the National Center for Health Statistics. First, to gather comprehensive, nationwide--and in some cases worldwide--information on the area they serve (i.e., population, housing, labor force, health care, education). Second, to gather data in a uniform, unbiased, statistically correct manner. And third, to provide the information they gather in an easy to understand format and at a price everyone can afford.

American business is creating these jobs I mentioned earlier in a rapidly changing and bitterly competitive free trade environment. Who would have predicted, for example, that South Korea would begin exporting cars to the U.S.? The American business community needs all the statistical information the federal government can provide in order to remain competitive in both domestic and world markets.

I have five suggestions for improving federal statistics.

Item one is measure the right thing. The world is changing, and statistics must change too. Our economy, for example, is dominated by services now, but government business statistics are dominated by manufacturing. Under the outdated system of classifying industries for statistical measurement, there are only 131 (4-digit SIC) industry codes for the service industries, compared to 452 for manufacturing industries--even though services now employ more Americans than manufacturing does. The government has been much too slow to bring its industry statistics into the 1980s.

One reason this hasn't happened is because the government statistical system is not a real system. Industry codes don't belong to any particular agency--they cut across programs, so they are extraordinarily difficult to change.

That leads to item two: Create a statistical system by putting responsibility for statistical planning in one place, and that includes a centralized statistical budget authority. As things stand now, a data gathering effort that involves more than one agency is vulnerable to budget cuts: one agency can decide it's not as interested in the program as others are, and a program that business depends on can vanish overnight. Anyone who's doing long-range planning--and businesses that plan to compete successfully all do that--needs statistics that are reliable and consistent, statistics to count on. Better coordination among government statistical agencies would not cost more; in fact, it would save money by unifying data-gathering efforts and streamlining surveys. Such a coordinated effort might uncover the real importance of a statistical program.

For instance, the shopping-by-catalog and direct-mail business has grown out of the new ability such businesses have to pinpoint their potential customers where they live, by combining business information with small area census information. A recent survey found that 40 percent of Americans now shop by mail. The effect on the U.S. Postal

Service has been astonishing. The additional revenue resulting from the increased mail volume has certainly been an important factor in the federal subsidy for general operating purposes to the Postal Service going from $920 million in 1979 to zero in 1983, 1984 and 1985. By helping to create additional postal service revenues, the census has already paid for itself. A modern, high quality statistical system is the best investment our government can make.

Item three is to work harder to make the data more timely. A particularly bad example was the long-delayed release of the new Consumer Expenditure Survey. That survey was begun in 1980 to replace data from the 1972-73 survey that were long outdated, due to major changes in oil prices and thus oil consumption patterns. But data for the quarterly interviews conducted in 1980 and 1981 were not released until last year, even though they had been processed long before. Another example is the occupational information that schools use in training students for jobs. A recent article in the Wall Street Journal quoted high school guidance counselors as saying they were having a hard time preparing students for high-tech careers because the government data they use are at least five years old.

Item four is to resist actions that would undermine the statistical system we have in order to save a few dollars. Although there will always be room for improvement, the Census Bureau and the other federal statistics gathering agencies are a national treasure. Ever since we became the first nation in history to mandate a census in our Constitution, we have collected more and more important information about ourselves as citizens, workers, producers, and consumers. Our data collection and analysis are the envy of the civilized world. The biggest threat to this admirable system would be to allow it to be whittled away bit by bit--whether by reducing the sample size of a survey (as has begun to happen with the Current Population Survey), reducing its frequency (as has happened to the formerly Annual Housing Survey), abolishing a storehouse of unique information like the Monthly Labor Review (perennially on the budgetary cutting board), or suppressing preparation of politically sensitive statistics (as has been suggested about data documenting the effects of non-cash benefits on the poverty rates). We ought to be doing more in the way of data-gathering; we cannot afford to do any less.

Item five is to spend whatever it takes (which would be less than $2 million) to develop a truly comprehensive file of international statistics. Most of the data already exist at the Census Bureau's International Division, but a budget reduction of about $1 million renders the bureau incapable of keeping the data up to date or disseminating them. One reason businesses have difficulty competing abroad is a lack of current information about the trade situation as it relates to their particular products or services.

The Department of Commerce still concentrates its efforts to collect trade data on heavy industry and on what the U.S. is importing and exporting. What is necessary to complete the picture is detailed, current data on consumer goods and services and on what other countries are producing domestically and importing from countries other than the U.S.

For example, suppose a U.S. manufacturer wants to sell furniture in the United Kingdom. To assess the market, they need to know several facts which are not readily available: (1) How much furniture of what type is sold in the U.K. each year? (2) How much furniture of what type does the U.K. produce domestically? (3) How much furniture does the U.K. import and from what supplier countries? (4) Has the U.S. share of those imports grown, remained stable, or decreased? (5) In what areas of furniture sales does it appear the U.S. could increase its market share? (6) What tariffs or other trade barriers exist?

It is the appropriate task of the U.S. government to bring together the data that will answer these questions for many products and services, if our industries are to compete successfully in other markets. Only the government can collect these data consistently and make them comparable for business to use in finding and penetrating new markets. Moreover, these data must be readily available through timesharing networks, state data centers, or some other mechanism that is set up to keep current. States should be some of the biggest users and promoters of a comprehensive trade data system that could assist them in promoting exports from their own state.

In terms of statistics about world markets, we are way behind other countries with which we must compete. It will take an extraordinary effort to catch up and once we have caught up--which we can do in a year or two of concentrated effort--there should never again be such a lapse. We are doing business in a very competitive global marketplace and our domestic and international statistical efforts must reflect that fact.

The bottom line is this: A few million dollars invested in high-quality federal statistics returns many thousands of jobs and billions of dollars in salaries and other benefits from increased American business.

Thank you for this opportunity to speak.

Senator SARBANES. Professor Juster, please proceed.

STATEMENT OF F. THOMAS JUSTER, DIRECTOR, INSTITUTE FOR SOCIAL RESEARCH AND PROFESSOR OF ECONOMICS, THE UNIVERSITY OF MICHIGAN

Mr. JUSTER. Thank you. There are three things that I covered in my prepared statement, which I will summarize briefly.

First, there is a brief overview of the way the U.S. statistical system has functioned, in particular, its very decentralized nature. And I note the range of activities that provide economic and other statistics to the Members of Congress and policymakers generally.

Second, I have some comments about some general trends for the 1980's in resources going into the Federal statistical programs broadly defined.

Finally, I took a careful look at a small number of specific problems where it seems to me the statistical system has serious problems, and is unable to provide adequate guidance to policymakers on questions of national importance to the economy and our society.

On the centralization issue, the U.S. system is highly decentralized. It is not like the European systems. Moreover, responsibility for collecting policy-relevant economic statistics goes well beyond Federal agencies with significant statistical responsibilities.

Many Federal agencies have substantial programs of basic and applied research, and many of those programs collect statistics which are highly relevant to understanding the economy and the society. And, even beyond Federal agencies with research programs focused on particular missions, another set of Federal agencies, including the National Science Foundation, maintain programs of basic research in which the design and collection of data and statistics play an important role.

Hence, any evaluation of the health of the Federal statistical systems with regard to economic statistics must not only take account of developments in agencies that have dominantly statistical functions, but also must be cognizant of developments in Federal agencies that have substantial programs of applied research in economics or in the other social sciences, as well as developments in agencies that have significant programs of basic research on economic or social conditions.

In terms of general trends, I haven't looked comprehensively at the entire set of 70-plus agencies. I looked at about 20 Federal activities of either mainline statistical programs like BLS, basic research programs with significant statistical components such as the ASPE program in HHS and parts of the National Science Foundation, especially the Social and Economic Science Division.

It is clear from looking at those programs as a group, that they have not yet kept pace with the growth of the economy as a whole, and have not even kept peace with inflation.

Between 1980 and 1987, which is my benchmark here, nominal GNP grew by some 63 percent; the GNP deflator rose by some 35 percent, while real GNP rose by about some 21 percent.

Over the same period, a reasonable sample of mainline Federal statistics agencies showed budget increases of just under 30 percent—less than the cost of living—while programs with a basic or applied research focus and an important statistical component rose by some 9 percent, and programs with an applied research, evaluation or demonstration project focus declined by almost 20 percent.

These numbers are not low because I have included EIA, which happens not to be in my sample.

Thus, none of the three categories of programs that have major statistical content, mainline Federal statistical agencies, basic or applied research in economics or in other social agencies, or applied and evaluation research in Federal mission agencies, even kept up with inflation over this period, and all were well below growth rates of the nominal GNP.

A reasonable overall summary covering all three of these types of programs is that resources in nominal dollars barely rose between 1980 and 1987, implying significant decline in real resources.

Given the budget contraints that this committee is well aware of, is this a reasonable record?

Statistical programs generally, and research programs with a strong statistical component, represent programs that are essential to the policy formulation process for both the administration and Congress, and ought to be independent of ideology or interventionist preferences.

The evidence suggests that our empirical base of knowledge about the economy and society has been significantly eroded in important respects over the past 7 years. Moreover, program cuts which deemphasize the importance of statistics and statistical programs are apt to have quite serious long-term impacts on both the agencies and the programs involved, since they convey a message to both current and prospective professional staffs of these agencies.

The message is that statistics are not very important, and that careers in statistical agencies are likely to be concerned with holding things together, rather than generating new knowledge—not much of an inducement to attract or hold talent in those agencies. I think that has been felt in terms of recruitment problems.

Finally, let me just turn to two cases where I think there are serious problems of national concern which founder in part in terms of understanding and in terms of policy because we don't have the proper data. One of the two illustrations has to do with education statistics.

In recent months there has been a good deal of public conern about the state of American education.

A blunt and reasonably accurate statement is that there is no information base from which the current state and performance of the American educational system can accurately be assessed. We know something about education, how many dollars are spent for teachers and other resources, how many teachers with what kind of formal certification are in the system, how many pupils there are, and so forth.

But we have virtually no information at the right level of detail, which would enable us to know with reasonable certainty whether the performance of the educational system is good, bad or indifferent, or has gotten better or worse. The requisite data almost certainly involves a system of educational statistics designed around the individual student and able to examine resources, processes and outcomes relating to individual students in particular classrooms.

With one notable exception, the longitudinal study of secondary schools students, such data are totally lacking and have always been lacking.

Does this mean that those concerned with the collection of educational statistics have done a poor job? Not necessarily.

One way to see the problem is to note that although health and education consume about equal amounts of national resources and have roughly equal amounts to total governmental expenditures, the expenditures for statistics and data relating to health exceed those for statistics and data relating to education by a factor of roughly 10 to 1.

It is, therefore, not surprising that we know quite a lot about health, but not very much about education. After all, we have spent hardly anything to find out what our educational system is doing.

My second major illustration is labor force data. These come from two sources; the Current Population Survey conducted by the Bureau of Census for the Bureau of Labor Statistics, and the so-called 790 Survey of Establishments, based upon the unemployment insurance programs of the various States.

These two sources of data have provided quite different pictures of changes in the labor force in the U.S. economy over the last several years. The two sources differ as to level, for reasons, that are well understood.

They also differ as to recent change, for reasons that are not well understood. For example, since the present recovery began in November 1982, the establishment survey shows the labor force growing by 12.6 percent, or at an annual rate of about 3.8 percent a year. The household survey shows that labor force growth is about 9.8 percent overall, since the recovery began, or slightly less than 3 percent per year. That's only 1 percentage point per year difference. But, ask yourself what the implication of that difference is. Since we measure productivity with the Establishment Survey, one implication of the difference is that if productivity growth were measured with the labor force survey, it would be 1 percentage point per year higher, or roughly double. Instead of productivity growing at about 1 percent per year, it would be growing at about 2 percent per year. Not great, but nowhere near as bad as 1 percent. That's an enormous difference, and we don't know which number is right.

Most observers appear to feel that the Establishment Survey provides a more reliable picture. It has a very large sample of establishments, is geared to a reporting system involving unemployment insurance, and presumably covers virtually all the firms that actually employ members of the labor force.

On the other hand, the CPS is a smaller sample—a large one, but smaller than the Establishment Survey—gets data from households rather than establishments, and has some conceptual problems involving the definition of being employed, being unemployed, or being out of the labor force.

My own assessment is that the CPS data are more likely to be right, simply because I am convinced that we know a great deal about how to sample households, and a great deal less about how to sample establishments.

In collecting data from establishments, the proper treatment of "births" and "deaths" is crucial—millions of establishments are born every year, and millions of them die. Moreover, most of the employment growth has been in small establishments with very high birth and death rates. And I am, frankly, very suspicious of any statistical system which runs through a series of State agencies, even when there are legal reporting requirements involved, since it is my clear impression that statistical programs run at the Federal level by agencies with a vast amount of experience in data collection are apt to be of better average quality than programs conducted at the State level where there is inevitable variation in the skills of those implementing the program.

I have two brief final illustrations. Both have to do with the fact that we have a lot of trouble in our national statistics with numbers that reflect the difference between two large offsetting other numbers.

The two illustrations are: the trade balance, where exports and imports are the two big offsetting numbers; and the personal savings data, where savings is the difference between income and consumption.

In both cases we have major problems because we either get data that are revised substantially when new numbers come in—that is the trade balance problem—or data where we have two alternative estimates and the alternative estimates don't look the same. That's the personal saving problem.

The estimates we get from the two different sources of household sector saving sometimes differ by a factor of 2 to 1—one is twice as big as the other.

Finally, let me give a brief summary.

Overall, the resources devoted to the collection of Federal statistics, both in the form of programs maintained by the mainline statistical agency and in the form of data and statistics associated with various basic and applied research programs, have apparently declined in real terms in the past half dozen years, and have not come close to keeping pace with the growth of GNP.

This shortfall is most serious in the case of data and statistics associated with various basic and applied research programs, although Federal statistical agency programs have also suffered significantly.

In a few illustrative cases, education statistics, labor force statistics, trade balance statistics, and savings statistics, consideration of important problems of public policy has been significantly hampered by the inadequacy of the statistical base on which such discussions must rest.

I thank the committee for its time.

Senator **Sarbanes**. Thank you very much.

Your full and complete statement will be inserted in the record.

[The prepared statement of Mr. Juster follows:]

PREPARED STATEMENT OF F. THOMAS JUSTER

Introduction

Senator Sarbanes and Members of the Joint Economic Committee: My name is F. Thomas Juster, and I am Director of the Institute for Social Research and Professor of Economics at The University of Michigan. By way of general background, I am a member of the Committee on National Statistics of the National Academy of Sciences, am chairing a committee on the state of economic statistics recently set up by the American Economic Association, am a member of the American Statistical Association Advisory Committee to the Energy Information Agency, a member of the National Academy of Sciences Committee to evaluate the National Center for Educational Statistics, and a Fellow of the American Statistical Association.

Outline of Testimony

My statement will cover three general topics. First, I provide a brief overview of the way in which the United States statistical system functions, in particular, its highly decentralized nature and the range of activities that provide economic and other statistics to members of the Congress and to policymakers generally. Second, I note some general trends for the 1980s in resources going into federal statistical programs broadly defined. And third, I examine a small number of specific problems where the statistical system has serious problems, and is unable to provide adequate guidance to policymakers on questions of national importance to the economy and the society. I make no attempt to be comprehensive here but simply focus on a few topics where I know something of the background, and where statistical shortcomings result in inadequate guidance to policymakers.

The U.S. Statistical System--Overview

Most developing countries have highly centralized statistical systems in which the responsibility for the collection of economic and social statistics is lodged in Central Bureau of Statistics or the equivalent. The U.S. is quite different in that regard, and the responsibility for federal statistical programs is widely diffused throughout a number of statistical agencies. The largest of these are the Census Bureau, the Bureau of Labor Statistics, the Energy Information Agency, the Bureau of Economic Analysis in the Department of Commerce, the Statistical Reporting Service of the U.S. Department of Agriculture and the National Center for Health Statistics. Previous testimony before this Committee has indicated that the total budget of such agencies comes to approximately $1.5 billion, and that more than 70 agencies spend at least half a million dollars annually on statistical activities.

The responsibility for collecting policy-relevant economic and social statistics goes well beyond federal agencies with significant statistical responsibility. Many federal agencies have substantial programs of basic and applied research, and many of those programs collect statistics that are highly relevant to understanding the economy and the society. And even beyond federal agencies with research programs focused on particular missions, another set of federal agencies, including the National Science Foundation, maintain programs of basic research in which the design and collection of data and statistics play an important role. Hence any evaluation of the health of the federal statistical system in regard to economic statistics must not only take account of developments in agencies (both federal and state) that have dominantly statistical functions, but must also be cognizant of developments in federal agencies that have substantial programs of applied research in economics or in the other social sciences, as well as agencies that have significant programs of basic research on economic or social conditions.

General Trends over the 1980s

The range of federal programs that have consequences for the quality of economic and other statistics in the U.S., as noted above, is very large, and I have not undertaken a detailed review of all the relevant federal programs. However, I have looked at about 20 federal activities that are either mainline statistical programs, basic research programs with a significant statistical component, or applied research programs that often collect data that provide valuable insights to policymakers. These programs include many of the mainline statistical agencies—the Bureau of Census, Bureau of Labor Statistics, National Center for Health Statistics, etc., plus a collection of programs that support basic and applied research in economics or in areas like health and education, and a number of programs that represent applied research, evaluation or demonstration projects in federal agencies that often produce significant statistical products.

Over the period from FY 1980 through projections for FY 1987, it is clear that these programs as a group have not kept pace with the growth of the economy as a whole, and have not even kept pace with inflation.

- Between FY 1980 and FY 1987, nominal GNP grew by some 63 percent; the GNP deflator rose by some 35 percent, while real GNP rose by some 21 percent. Thus to keep pace with inflation and maintain real resource availability, programs would have had to increase by at least 35 percent over this period, and to keep pace with the growth of GNP, programs would have had to increase by 63 percent.

- Over this period, a reasonably representative sample of mainline federal statistical agencies showed budget increases of just under 30 percent, while programs with a basic or applied research focus and an important statistical component rose by some 9 percent, and programs with an applied research, evaluation or demonstration project focus declined by almost 20 percent.

- Thus none of the three categories of programs that have major statistical content—mainline federal statistical agencies, basic or applied research in economics or in other social sciences, or applied and evaluation research in federal mission agencies, even kept up with inflation over this period, and all were well below growth rates of nominal GNP.

- A reasonable overall summary covering all three of these types of statistical programs is that resources in nominal dollars barely rose between 1980 and 1987, implying a significant decline in real resources.

Given the budget restraints that this Committee is well aware of, is this a reasonable record in support of federal statistical activities? I submit that the record leaves much to be desired. One might expect that an administration disinclined to initiate new federal nondefense programs is quite likely to cut statistical activities related to policy-relevant programs. One might easily argue that the reverse is good policy—if you are disinclined to be activist in terms of federal programs, it might be well to maintain the research base on which knowledge about program consequences ought to rest. But the shortfall in basic research with a significant statistical component, and in mainline federal statistical activities themselves, is much more difficult to justify even in a period of significant budget constraint. Statistical programs generally, and research programs with a strong statistical component, represent programs that are essential to the policy formulation process for both the Administration and the Congress, and ought to be independent of ideology or interventionist preferences. The evidence suggests that our empirical base of knowledge about the economy and the society has been significantly eroded in important respects over the past seven years. Moreover, program cuts which deemphasize the importance of statistics and statistical programs are apt to have quite serious long-term impacts on both the agencies and the programs involved, since they convey a message to both current and prospective professional staffs of these agencies. The message is that statistics is not very important, and that careers in statistical agencies are likely to be concerned with holding things together rather than generating new knowledge--not much of an inducement to attract talent.

Some Illustrative Cases

I would like to call the Committee's attention to four specific problem areas where I judge that statistical issues have clouded the formulation of public policy, and where the situation could be improved with better information. These areas deal with education statistics generally, with estimates of the labor force and productivity, with estimates of the foreign trade balance, and with estimates of personal saving behavior.

Education Statistics

In recent months, there has been a good deal of public concern about the state of American education. Thus an important issue is: to what degree does the federal statistical system provide an adequate picture of the current conditions of the American education system, especially in the primary and secondary grades, and particulary as it relates to mathematics and science training?

A blunt and reasonably accurate statement is that there is not information base from which the current state and performance of the American educatonal system can accurately be assessed. We know something about American education--how many dollars are spent for teachers and other resources, how many teachers with what kind of formal certification are in the system, how many pupils there are, etc. But we have virtually no information, at the right level of detail, which would enable anyone to know with reasonable certainty that the performance of the educational system is good, bad or indifferent, or had gotten better or worse. The requisite data almost certainly involve a system of educational statistics designed around the individual student, and able to examine resource,s processes and outcomes relating to individual students in particular classrooms. With one notable exception (the longitudinal study of secondary school students), such data are totally lacking and have always been lacking.

Does this mean that those concerned with the collection of educational statistics have done a poor job? Not necessarily. One way to see the problem is to note that, although health and education consume about equal amounts of national resources and have roughly equal amounts of total governmental expenditures, the expenditures for statistics and data relating to health exceed those for statistics and data relating to education by a factor of 10 to 1. It is therefore not surprising that we know quite a lot about health, but not very much about education--after all, we have spent hardly anything to find out about what our educational system is doing. A forthcoming report of the National Academy of Sciences (prepared by an NAS Committee to Evaluate the National Center for Educational Statistics), discusses these issues in greater detail, and will provide recommendations as to how the state of our knowledge about educational processes and performance can be improved. But it is guaranteed that improving the system will cost money, and substantially more than the significant funding increment contained in the FY 1987 budget for the Center of Statistics in the Office of Educational Research and Improvement. I will be happy to elaborate on these comments if the Committee wishes.

Labor Force Data

U.S. data on the labor force come from two basic sources--the Current Population Survey conducted by the Bureau of Census for the Bureau of Labor Statistics, and the "790" Survey of Establishments, based on the unemployment insurance programs of the various states. The CPS is a very large household sample of some 60 thousand respondents, while the 790 Survey is an even larger sample of business establishments.

These two sources of data have provided quite different pictures of changes in the labor force in the U.S. economy over the last several years. The two sources differ as to level, for reasons that are well understood. They also differ as to recent change, for reasons that are not well understood: For example, since the present recovery began (in November, 1982), the establishment survey shows the labor force growing by 12.6%, at an annual rate of about 3.8% per year. The household survey shows labor force growth of 9.8% overall, or slightly less than 3% per year. The annual growth rate of productivity, which is based on the establishment survey, has been very disappointing at about 1% per year; it would be almost twice as large if the household survey were used to estimate the growth of labor supply. Which is correct?

Most observers appear to feel that the Establishment Survey provides a more reliable picture--it has a very large sample of establishments, is geared to a reporting system involving unemployment insurance, and presumably covers virtually all of the firms that actually employ members of the labor force. On the other hand, the CPS is a much smaller sample (although quite large in absolute terms), gets data from households rather than from establishments, and has some conceptual problems involving the definition of being employed, being unemployed, or being out of the labor force.

My own assessment is that the CPS data are more likely to be right, simply because I am convinced that we know a great deal about how to sample households, and a good deal less about how to sample establishments. In collecting data from establishments, the proper treatment of "births" and "deaths" is crucial--millions of establishments are born every year, and millions of them die. Moreover, most of the employment growth has been in small establishments with very high birth and death rates. And I am frankly suspicious of any system which runs through a series of state agencies, even when there are legal reporting requirements involved, since it is my clear impression that statistical programs run at the federal level by agencies with a vast amount of experience in data collection are apt to be of better quality than programs conducted at the state level, with the inevitable variation in the skills of those carrying out those surveys.

It is hard to believe that so crucial a number as the total number of Americans employed, at what wages, and for how many hours, is as uncertain as it appears to be. While not every problem can be fixed by "throwing money at it," it is hard for me to believe that a careful examination of the design, structure and content of the 790 Establishment Survey would not enable us to be able to come to some conclusion about how the labor force should be measured, and what the right measurement would show.

Trade Balance

During recent years we have become accustomed to finding large differences between preliminary estimates of GNP growth and final estimates. Just as a recent illustration, the fourth quarter of 1985 was originally estimated as having in excess of three percent real growth, and it now appears that real growth was of the order of seven-tenths of one percent. Not a small difference!

A major problem with measuring real economic growth during recent years lies in trying to get better estimates of both imports and exports, and of the crucial difference between them. Exports add to U.S. GNP, while exports do only insofar as they generate wholesale and retail trade services on imported goods. Since the net foreign trade balance is the difference between two very large numbers, and since our current reporting system yields such big differences between preliminary estimates and final estimates, one would assume that the application of more resources would enable us to do a better job. The problem here is likely to be one of timeliness in the data—both imports and exports are likely to be partly extrapolated from recent performance, and such extrapolations are not necessarily a good substitute for real data on actual flows.

The trade balance problem seems to me symptomatic of a more general problem in our National Income and Product Accounts System--in past decades, foreign trade flows were not very important in the U.S. economic picture, but during the last decade they have become very important and our statistical reporting system may not have kept pace with that fact.

Personal Saving

We generate two estimates of personal saving behavior in the U.S.—one from the National Income and Product Accounts, where saving is a residual between disposable income and consumer expenditures, the other from our Flow of Funds accounting system, where personal saving is again a residual, but here between asset and liability changes allocated to nonhousehold sectors and the total of assets and liability changes. The differences in the two series are very substantial, and always have been. One (the Flow of Funds data) show no trend at all during the entire post-War period in the ratio of personal saving to disposable income, while the other (NIPA) generally shows no trend but shows a recent tendency for the saving income ratio to decline. Given the importance of personal saving behavior to capital markets and to investment flows, having a better measure of this crucial variable seemed of obvious importance. Getting a better measure would certainly not be inexpensive, but the situation is not going to improve without the application of substantial additional resources.

Summary

The main thrust of my comments is that:

1. Overall, the resources devoted to the collection of federal statistics, both in the form of programs maintained by the mainline statistical agency and in the form of data and statistics associated with various basic and applied research programs, have apparently declined in real terms in the past half dozen years, and have not come close to keeping pace with the growth of GNP.

2. The shortfall is most serious in the case of data and statistics associated with various basic and applied research programs, although federal statistical agency programs have also suffered significantly.

3. In a few illustrative cases—the state of education statistics, the state of labor force statistics, trade balance statistics, and saving statistics, consideration of important problems of public policy have been significantly hampered by the inadequacy of the statistical base on which such discussions must rest.

I would like to thank the Committee for this opportunity and would be happy to answer any questions that you might have.

Senator SARBANES. Professor Bonnen, please proceed.

STATEMENT OF JAMES T. BONNEN, PROFESSOR OF AGRICULTURAL ECONOMICS, MICHIGAN STATE UNIVERSITY

Mr. BONNEN. Thank you, Senator.

I want to first apologize for not being able to provide my prepared statement to you last Wednesday. I returned from my father's 90th birthday celebration on Wednesday, a week ago, with my income tax not turned in. So, I have been on a fast track. [Laughter.]

My prepared statement starts with a brief overview of the evolution of the coordination of statistical policy. In addition, I will leave with you a paper I published in 1984 that provides a detailed description of that history.

Senator SARBANES. That will be included in the record at the end of your oral statement. We appreciate that very much.

Mr. BONNEN. The events of the last decade leave the statistical system in a muddle and heading for mediocrity unless more attention and importance is accorded to it.

Ours is the most decentralized statistical system in any industrial nation. It is also probably the best statistical system even today. However, it is now losing ground and if this trend is not reversed, in my judgment several European systems will soon outstrip us in the quality of statistics, if not perhaps in coverage.

The significance of this in the information age cannot be exaggerated. Much of our margin in productivity, in economic affairs, lies in the quality of our information base and our ability to use it.

In terms of coordination, I would point out that in early May 1982, OMB dissolved their statistical policy branch and dispersed its personnel. It was reconstituted only under direct instructions from Congress, and now contains six people as indicated earlier.

This is hardly the capacity that is needed to coordinate the entire Federal statistical system. Without qualification, I would assert that today we lack the capability for a nationally coordinated statistical policy. The OMB unit does what it can, but by virtue of OMB's lack of leadership, interest, and understanding of statistics, as well as the unit's miniscule resources, this does not add up to a coordinated national policy for statistics.

There is a brief discussion in my prepared statement of the current state of the Federal statistical system, but it duplicates much of the testimony from your hearing last month. I concur in this testimony on what the budget and other constraints have done. I did spend a little time developing the effect of paperwork reduction in budgets which are now beginning to have some constraining effect.

The effect of these constraints, however, is to have mortgaged our future, our future capability to support informed decision in Federal policy and in the private sector. Real resource constraints have led to major reductions in research activities in many of the statistical agencies. Ms. Gramm placed great emphasis on the need for conceptual and methodological research needs. This is exactly the function that has perhaps suffered the greatest in the constraint on budgets, in my judgment.

Personnel ceilings, plus budget constraints, have led to the failure to hire and hold a new generation of statisticians. There is a hole in the composition of the personnel in most agencies.

Assaults on "useless bureaucrats," a generally demeaning attitude toward Federal employees, low morale and loss of many of the best people to early retirement and the private sector have affected a number of the statistical agencies, just as they have the rest of the Government.

The long run has consistently been sacrificed to the short run. Where statistical leadership will come from 10 years from now, I shudder to think about. Sacrificing everything to the short run has reduced our ability to deal with the obsolescence of concepts that comes with change in markets, economic and social structure, institutions and new technologies.

As Joe Duncan pointed out in quoting Geoffrey Moore, "If economic statistics are not continually improved, they will deteriorate."

The statistical system in the United States in a public utility whose basic capability we are allowing to deteriorate. This is a tragedy, which will probably reach political consciousness in the 1990's when the real disasters begin to occur.

Now, let me turn to statistical coordination. In an increasingly complex society and economy, if we do not have objective, accurate and relevant information in making decisions, our comprehension of the world will forever run behind events.

With probably the world's most decentralized statistical system, coordination of statistical policy occurs at the departmental level, but without an effective coordinating unit at the national level, the system as a whole lacks effective policy coordination and action capability.

Given our political institutions, statistical coordination needs to be addressed both in the executive branch and in the Congress. Congress, as I believe Joe Duncan pointed out, has responsibilities for statistical matters scattered over several committees. And there is no one place where the system as a whole is addressed by the Congress.

This focus is needed in both the House and the Senate if we are really to do a good job of national coordination. Indeed, it is a congressional focus that would provide some of the durability for the executive branch unit.

In my prepared statement, I give four examples of poor coordination. I will not read anything from that, just point out what they are.

They occurred in the context of forming the 1982-83 budgets. This committee had a major role in redressing these coordination failures.

One was the dropping of the budget for the survey on income and program participation in midstream, so to speak.

Another egregious example is the failure to include in all of the four different departmental budgets from which the resources come, the money for updating the sample frame for the five very large Federal household surveys.

The sample frame had a 10-year-old 1970 census base. The 1980 census results were at hand and the data collected in the household surveys were deteriorating rapidly. Yet we do not propose to do anything about it.

There are a couple of other examples of that duplication that I have given. One which was identified at last month's hearing, is the SSEL and the Business Establishment List. I won't elaborate on that.

The other one is the continuously maintained USDA sample frame for farms and the agriculture census list frame which is revised on a 15-year cycle. It is the same basic universe. We have known for several decades that they ought to be merged, but unless there is strong central coordination, the interest groups and the turf involved and some of the legal problems prevent you from doing that.

I would observe that in effect the Congress has been performing the statistical priority-setting function on which OMB has defaulted. This is despite the fact that coordination is not the Congress' strong suit.

One must be clear on what statistical policy coordination is. That can be a slippery subject. My prepared statement listes 10 functions or activities with which not only a central unit, but a unit at departmental and agency level should be concerned.

Coordination must occur at every level at which decisions are made, not just at the national level and not just at agency level. But all the way along wherever there is a major focus for decisionmaking you need some concern over the coordination of statistical policy.

Let me briefly list the functions that I believe are the most important in a statistical policy coordination activity.

First, determining data needs. That is the setting of statistical priorities, especially—this is important—where you have a decentralized system.

Second, analyzing prospective uses of data so that statistical designs are appropriate and misuses of data are avoided.

Third, coordinating and linking statistical policy with public policy decisions at each level of decisionmaking.

Fourth, maintaining the quality of existing Federal statistics through audits and clearances.

Fifth, assuring privacy and confidentiality of statistical collections.

Sixth, protecting the integrity of statistical collections.

Seventh, facilitating user access.

Eighth, reducing respondent burden through appropriate statistical design, standards and synthetic estimates and the greater use of administrative records for statistical purposes.

Ninth, one of the most important is the establishment of standard concepts, classifications and procedures. You cannot have an effective statistical system without standards, and we have a huge backlog of problems in standardization of concepts and of classifications and procedures.

Tenth, managing Federal-State-local statistical system relationships are a necessary function.

If you have done all that, and there are other things as well that can be included, you have also accomplished the final purpose of coordination, which is achieving the most efficient use of resources of a very decentralized statistical system.

In your invitation to me you asked that I address three questions.

One was, Is the Office of Management and Budget doing a satisfactory job of coordinating the wide variety of statistics produced by the Federal Government?

I believe my preceding comments answer that with a clear no. It simply hasn't the capacity.

Another question you asked was, Have the key recommendations of the 1978-80 Statistical Reorganization Project been carried out?

The answer to that is no. They never were. The legislation we developed died in Congress in 1980. It got run over by a truck called The Paperwork Reduction Act of 1980.

The final question was, If they had not been acted on, are these recommendations still relevant today?

And the answer to that is also clear, they are. They still are relevant at least in their broad implications. Sidney Jones' testimony underlines that. We lack the necessary capacity to coordinate statistical policy at the national level.

Indeed, we are clearly worse off today than we were in 1980.

I have brought a few copies of the final report, of the Statistical Reorganization Project for whatever use you might have, for the record or for your staff.

Let me summarize the main thrust of that report, and I will conclude.

We concluded after study that five broad conditions must exist for an effective national policy coordinating function to exist and to endure.

One of the big problems historically has been its inability to endure. Thus, adequate authority should be vested in the office. Authority for statistical policy is not vested in the office today, it is vested in the OMB Director, and indeed the office itself is embedded in a regulatory policy unit, which is a highly political command and control function.

This unit also has five other functions, some of which are also fairly inconsistent with maintaining a longrun, objective statistical policy function.

Second, institutional arrangements should exist to ensure on a continuing basis, that the output of the statistical system, will be policy relevant.

The OMB unit today lacks the necessary connections to policy.

Third, the integrity of the statistical data base, coordinated by the office, should be visibly preserved and strengthened.

And again, there is a long list of inadequacies.

Fourth, the authority of the office should be embedded within a set of functions that collectively ensure the knowledge and understanding by the office of both user needs and statistical system data problems.

In other words, you have to have the professional competence and scope of competence within the office in order to execute the functions credibly. And, with only six personnel they simply can't do that. They don't have enough professional staff.

Fifth, the organization must have durability.

The past record is not encouraging. As I said, OMB dissolved the unit as unneeded in 1982, and it was only at Congress' insistence that it was reestablished.

The implications of these requirements led us to a series of specific recommendations. We recommended that an Office of Statistical Policy be established as a separate organization in the Executive Office of the President. The entire history of statistical policy in OMB has been one of progressive erosion and failure starting almost from the beginning.

It is difficult to see how a durable unit will survive today in an OMB that is far more politicized than it was when much of the erosion of statistical policy coordination took place.

By the way, there is a very impressive little book by Larry Berman that addresses the nature of OMB today compared to what is was several decades ago. It is referenced in my testimony. It partly explains the problems that statistics face in OMB, if staff wishes to examine that question.

We recommended also that the Director of the Office of Statistical Policy, that is the chief statistician, be a Presidential appointee confirmed by the Senate.

A new Council on Statistical Policy should be established in the Executive Office and chaired by the Director of the Office of Statistical Policy.

One could organize it the way Mr. Jones suggested, and achieve basically the same goals, I think.

Represented on such a council, as we suggested it, would be the Council of Economic Advisers, OMB, and other Executive Office organizations and executive branch agencies as deemed appropriate by the President.

The Federal Reserve Board should be invited as a member. And it is possible to think about representing some of the entities within the Congress, although there are separation of powers problems.

The Council would review the annual statistical planning guidelines to be issued by the Office of Statistical Policy and provide advice on statistical programs and priorities.

In addition, an external advisory committee on statistical priorities has to be created. We have external users as well, and members of this committee should be selected without regard to their political affiliations.

We recommended that a common statutory basis for statistical confidentiality be established. And we drafted such legislation.

This is a very complex set of issues. We can't go into them here. Confidentiality is very important, and at present an obstacle to effective coordination across the Federal statistics system.

In order to ensure the durability of the organization, it was recommended that the Office of Statistical Policy's mission and function be established in legislative form and be subject to legislative oversight and appropriations authority of the Congress.

Included in the report of the project was an outline of a system for integrating statistical policy priority setting with the OMB budget process. This is a necessary protocol, especially between two separate units. The Statistical Policy Office would be a small unit of no more than 40 people.

At the time the project report was written, we had in mind a substantially larger unit.

Since that time, in thinking about this and reacting to the Paperwork Reduction Act, I have come to the conclusion that all that is necessary is a small unit in the Executive Office, complemented by smaller units at the Cabinet department level.

In other words, if you coordinate the system at every level, much less of a presence is needed in the Executive Office. But, the personnel must be high-quality experienced statisticians, economists, demographers, and other types of analysts.

Let me finish by observing that we have only two choices; we can coordinate a decentralized system by establishing a stronger, credible coodinating unit, or we face an extremely different alternative, as Sidney Jones suggested, centralization of all statistical activities into one Federal agency.

And one of these days, if we get into a big enough mess in failing to coordinate a decentralized system, we are going to be forced into a centralized system—if the mess we make is big enough. Despite the interest groups and others who are against such a change, there are many people and groups who would support centralization.

I, personally, prefer a decentralized system, but it does require central coordination.

Senator SARBANES. Thank you very much, Jim.

Your prepared statement will be put in the record.

[The prepared statement of Mr. Bonnen, together with the material referred to for the record, follows:]

PREPARED STATEMENT OF JAMES T. BONNEN

The Current State of the Coordination of U.S. Statistical Policy

Mr. Chairman, I appreciate the opportunity to comment on the current state of the statistical system of the United States. I am Professor James T. Bonnen from the faculty of Michigan State University. I am an economist and a long time member of the American Statistical Association. I served on the ASA Committee on Government Statistics for six years and chaired it in 1984. In addition, I directed the 1978-80 White House Statistical System Reorganization Project. The purpose of this project was to explore the current problems and functions of statistical policy, to recommend the most appropriate location for the statistical policy office, and to design the institutions and recommend the resources necessary to obtain a coordinated national level performance from a very decentralized statistical system.

Efforts to provide central coordination of statistical policy and standards go back as far as 1908. Successfully sustained coordination began with the 1933 Social Science Research Council-American Statistical Association Committee on Government Statistics and Information Services. On the basis of that committee's analysis and recommendations, the federal government established the Central Statistical Board in 1933. This independent agency was merged with the Bureau of the Budget (BOB) in 1939, when the BOB was transferred to the Executive Office from the Treasury Department. By 1947 the BOB Division of Statistical Standards had become a 69 person unit managing statistical policy coordination and forms clearance under the 1942 Federal Reports Act and the 1921 Budget and Accounting Procedures Act. This unit was composed of and led by statistical professionals.

Thirty years later, by 1977, the Bureau of the Budget had become the Office of Management and Budget and about doubled in size, but its statistical policy division had lost 40 of its original 69 positions. This personnel reduction of nearly 60% occurred in the face of an immense expansion in new statistical programs in 30 years. Federal statistical budgets expanded ten-fold in real dollar terms to about a billion dollars a year by 1980 while the number employed in statistical units and programs grew five-fold to about 30,000 positions. Regulatory and administrative record collections have grown several times faster than statistics. We now have a backlog of statistical standards work comparable to or exceeding that generated by the program initiatives of the Great Depression and World War II.

Between 1947 and 1977 OMB-White House decisions stripped personnel, institutional access and authority from central statistical policy. Statistical policy with its low political sex appeal, long planning horizons, and low short-run payoffs, when ranked by the crisis driven values of most political decision makers, was found to be less important than the activities supporting budget and other policy decisions (Berman 1979, 46-47). These short-run budget and policy decisions are where the day-to-day political pressures are most intense and upon which OMB's performance is judged in the White House. With very few exceptions, whenever push comes has come to shove in OMB, statistical policy has lost.

In 1977 the Carter Administration reorganized the Executive Office to reduce the number of personnel and activities. In the process statistical policy was exiled to the Commerce Department leaving behind in OMB its paperwork reduction and clearance functions. This shattered institutional arrangements that had prevailed for three decades. Belatedly the White House and OMB decided this probably had been a mistake and mounted the statistical reorganization project to address the questions raised by the need for a statistical policy coordination function somewhere in government. Thus the history of statistical coordination of the federal statistical system is one of neglect and inadvertent abuse because it is not considered important generally by decision makers and its needs ignored even when decisions are being made that affect it (See Bonnen 1984 for more detail).

Events of the last decade leave the statistical system in a muddle and headed for mediocrity unless more attention and importance is accorded it. This is the most decentralized statistical system in any industrial nation. It is also probably the best statistical system even today. However, it is now loosing ground and if this trend is not reversed several European systems will soon outstrip us in the quality of statistics and perhaps even coverage. In early May 1982 OMB dissolved their statistical policy branch and dispersed its personnel. Under direct instructions from Congress, OMB subsequently reconstituted a statistical policy group but this now contains no more than five full time personnel in addition to its Director. This is hardly the capacity needed to coordinate the entire federal statistical system. Without qualification I would assert that today we lack the capability for a nationally coordinated statistical policy. The OMB unit does what it can, but by virtue of OMB's lack of interest, understanding and leadership, and the unit's miniscule resources, this does not add up to a coordinated national policy for statistics.

Other Constraints on the Federal Statistical System

There have been many other constraints imposed on the statistical system that have slowly impaired its capacity and quality. Testifying before you last month were Dr. Courtenay Slater of CEC Associates, Joseph W. Duncan of Dun and Bradstreet, a former Chief Statistician of the United States, and Katherine K. Wallman, Executive Director of the Council of Professional Associations on Federal Statistics. They described in detail the deterioration of the system that has occurred in recent years. I will not repeat their testimony but I do wish to concur in it. There are a number of constraints on the system today. The substantial real dollar budget losses were laid out clearly by Dr. Slater in her study for the Joint Economic Committee on the "Opportunities for Improving

Statistics." Personnel reductions are perhaps an even more serious current constraint on the system. In addition, I would like to point out that the paperwork reduction budget is becoming a serious constraint on our ability to collect statistics. The original paperwork burden reductions came from slack in the system and from cabinet departments in which regulatory activities were eliminated or reduced. Now, however, these reductions are behind us and current reductions in paperwork are now cutting into statistical agency capability. This is particularly sad, in as much as statistical agencies produce less than 2% of the paperwork burden and already are the most efficient data retrieval systems. Statistical data collection is made under conditions that create far less burden, assure greater accuracy and value than typical administrative records, where unnecessary 100% samples, inadequate frame design, duplicate collections, confused purposes, and other difficulties are common because of poor design skills. The burden problems of a respondent to a regulatory collection should be viewed differently than the problems of a respondent to a grant record, and both should viewed differently from those of a respondent to a statistical survey, but they are not in OMB. Thus, the burden budget is a blunt instrument that needs considerable refinement if it is to be effective rather than destructive.

We have mortgaged the future of federal statistical capability to support informed decision in both the public and private sector. Real resource constraints have caused major reductions in research activities in many federal statistical agencies. Personnel ceilings plus budget constraints have led to a failure to hire and hold a new generation of statisticians. Due to assaults on "useless bureaucrats" and a generally demeaning attitude toward federal employees, low morale and loss of many of the best people to early retirement and the private sector have affected many statistical agencies just as they have the rest of government. The long run has consistently been sacrificed to the short run. Where statistical leadership will come from 10 years from now, I shudder to think. Sacrificing statistical research to short run needs has reduced our ability to deal with the obsolescence of concepts that comes with change in markets, economic and social structure, institutions and new technologies. As Joe Duncan pointed out in his testimony in quoting Geoffrey Moore, "If economic statistics are not continually improved, they will deteriorate." The world changes around us and if we do not keep our statistical concepts up to date, the data grow obsolete. If we do not keep statistical measurement and processing technologies up to date, the accuracy and quality of our numbers will also decline. While the private sector has kept up generally, the public sector now lags behind and has increasing difficulty in relating to the needs and the data capabilities of the private sector. The statistical system of the United States is a public utility whose basic capability we are allowing to deteriorate. This is a tragedy, which will probably reach political consciousness in the 1990s when the long term effects begin to be felt.

The Need for Statistical Coordination of the Federal System

Ours is an increasingly complex economy and society. If we do not have objective, accurate and relevant information in making decisions, our comprehension of the world will forever run behind events. With probably the world's most decentralized statistical system, coordination of statistical policy occurs at the departmental level but, without the necessary coordinating capacity at the national level, the system as a whole lacks effective policy coordination and action capability.

Given the nature of our political institutions, national level direction of statistical coordination must take place both in the Executive Branch and the Congress. This means that there should be a single committee in the House and in the Senate for oversight of the entire statistical system. Dr. Duncan pointed out in his testimony those committees that have some continuing interest and responsibility for parts of the statistical system. No one of them has authority or responsibility for oversight of the entire statistical system. Since many national data requirements involve integration of data bases scattered through several cabinet departments, an effective national level unit in the

Executive Office is needed, if we are to achieve true national level coordination of statistical policy. We now have an inadequate executive branch capability. The individual statistical agencies are on their own.

Examples of Poor Coordination

The consequence of this can be seen in a number of failures to coordinate budget decisions across cabinet agencies that occurred during the cuts in the 1982-83 budgets. The 1983 Reagan budget eliminated the Survey of Income and Program Participation after it was well under way, and left out of several department budgets the funds necessary to redesign the large federal household surveys. In addition a number of other important collections were substantially reduced or injured in various ways. Were it not for the 1982 Joint Economic Committee study by Dr. Courtenay Slater and this committee's recommendations accepted by the House and Senate Appropriations Committees, very substantial damage would have been done to the statistical base of this country. This was an acid test of OMB's current capacity for statistical policy coordination, since the real resources of federal statistics were being cut by about 20% with widespread reductions of sample size, detail and frequency of collection as well as the elimination of entire collections.

An especially egregious example of OMB's failure to establish national statistical priorities in the budget process was their inaction in the face of inconsistent departmental budget decisions that killed the capacity to redesign the five federal household surveys in health, housing, crime, consumer expenditures and current population (CPS). The sample frame for these five large surveys was based on the 1970 census, then over a decade old. The 1980 census was in hand for redesign of the survey sample frames. Each year billions of dollars of federal expenditures and major policy decisions depend on the accuracy of these five large household surveys. It took Congress to put most of the money back in the budget without any noise at all from OMB.

Another example was the attempt to eliminate the Survey of Income and Program Participation (SIPP) in which millions had already been invested in order to link participation in various welfare programs to income. This data base is absolutely central to the administration's effort to address the problems associated with participation in multiple welfare programs. They apparently needed no facts but Congress thought they should have a few numbers.

There are other cases where stronger coordination could play a role in eliminating the duplication of collections. An example of this involves the Standard Statistical Establishment List (SSEL) maintained by Census and the Business Establishment List maintained by the Bureau of Labor Statistics. As Joe Duncan indicated these are separately constructed, duplicative sample frames. A better universe for both could be maintained for less money, if these two sample frames were funded and managed as one. A similar example is the USDA sample frame of farms used for its periodic surveys and the agricultural census universe that the Bureau of the Census must develop every five years. If these were combined substantial monies could be saved and a continuing, much less costly, universe could be maintained for both the Census and the Department of Agriculture. There are legal as well as bureaucratic obstacles to the needed integration in both cases.

If the Administration had gotten all of its proposed budgets through Congress without modification, I estimate that total real resources in federal statistics today would be 35 to 40% below 1980 levels, instead of about 20% -- with more cuts coming in the 1987 budget. Many of these proposed cuts in the statistical budget never made it through Congress, and the recovery from 1983 budget levels is due to congressional concern and action. The level of activity and interest in Congress on statistical budgets and policy since 1981 has been nothing short of remarkable. In affect, Congress has been performing the statistical policy priority-setting function abdicated by OMB. This despite the fact that congressional oversight of statistics is too fragmented for Congress to manage effectively or easily.

What is Statistical Policy Coordination?

Perhaps I should be more specific about the types of activities or functions that constitute statistical policy and its coordination at the national level. Let me list those I believe to be the most important. Any experienced government statistician could probably add another ten to this list. Most coordination of statistical policy should and does take place at the department and agency level. That continues to be done rather well in most cabinet agencies, although in a number of the newer cabinet agencies statistical coordination is not done at the department level at all. Some departments have no statistical agencies but rather statistical programs managed by nonstatistical agencies. The following list of functions of coordination should exist at every major decision level.

The coordination of statistical policy involves:

1. Determining data needs so that cooperative planning and budgeting of statistical output across departments and agencies are possible and result in relevant statistics and avoidance of gaps and duplicative data -- i.e., setting statistical priorities.

2. Analyzing perspective uses of data so that statistical designs are appropriate and misuses of data are avoided.

3. Coordinating and linking statistical policy with public policy decisions at each level of decision making.

4. Maintaining the quality of existing federal statistics through statistical audits and clearance, assuring the use of appropriate, state-of-the-art statistical methods in the design and collection of data.

5. Assuring privacy and confidentiality of statistical collections.

6. Protecting the integrity of statistical collections.

7. Facilitating user access to an extremely decentralized statistical system by assuring a) the means to locate and retrieve relevant data, and b) access to information on the nature and limitations of the retrieved statistics with a minimum of delay and at reasonable cost.

8. Reducing respondent burden through appropriate statistical design, standards, synthetic estimates, and greater use of administrative records for statistical purposes, as well as the application of statistical methods to administrative and regulatory records.

9. Establishing standard concepts, classifications and procedures (a) to assure comparability and permit integration of data from diverse sources to serve multiple decision makers and diverse users, and (b) to provide common data classification and detailed building blocks definitions allowing multiple uses to be served from single collections.

10. Monitoring federal-state-local statistical systems and facilitating linkages and coordination of federal statistical activities those of states, local governments, other countries, universities, private corporations, and so on.

While there are other activities and goals, if you have achieved all of these purposes of statistical coordination, you have also accomplished the final purpose.

11. Achieving the most efficient use of resources of a very decentralized statistical system.

Today we have only a fraction of the capability needed to achieve these goals.

Recommendations of the 1978-80 Statistical Reorganization Project

In your invitation to me you asked that I address three questions. One was "Is the Office of Management and Budget doing a satisfactory job of coordinating the wide variety of statistics produced by the federal government?" I believe my preceding comments answer that with a clear no! It has not the capacity. The other questions you asked were "Have the key recommendations of the 1978-80 Statistical Reorganization Project been carried out?" The answer to that is no, they have not. Your final question was "If they had not, are these recommendations still relevant today?" The answer to that is they are, at least in their broad implications. They are still relevant because we continue to lack the capacity to coordinate statistical policy at the national level. Indeed, we are clearly worse off today than we were in 1980.

I brought with me a few copies for you of the issue of the American Statistician in which the final report of the Project was eventually published (Bonnen et al, 1981). I will describe here only the major recommendations. We concluded that five broad conditions must exist for an effective national policy coordinating function to exist and endure.

- Adequate authority should be vested in the office.
- Institutional arrangements should exist to insure on a continuing basis that the output of the system will be policy relevant.
- The integrity of the statistical data base, coordinated by the office, should be visibly preserved and strengthened.
- The authority of the office should be embedded within a set of functions that collectively ensure the knowledge and understanding by the office of both user needs and statistical system data problems.
- The organization must have durability.

The implications of these requirements led us to a series of recommendations. We recommended that an Office of Statistical Policy be established as a separate organization in the Executive Office of the President. The entire history of statistical policy in OMB has been one of progressive erosion and failure. It is difficult to see how a durable unit will survive in an OMB that today is far more politicized than it was when much of the erosion of statistical policy coordination took place (Berman 1979).

We recommended also that the Director of the Office of Statistical Policy (Chief Statistician) be a presidential appointee, confirmed by the Senate.

A new Council on Statistical Policy was to be established in the Executive Office and chaired by the Director of the Office Statistical Policy. Represented on the Council would be the Council of Economic Advisors, OMB and other Executive Office organizations and executive branch agencies as deemed appropriate by the President. The Federal Reserve Board would be invited to be a member. The Council would review the annual statistical planning guidelines to be issued by the Office of Statistical Policy and provide advice on statistical programs and priorities to serve federal policy needs.

In addition an external advisory committee on statistical priorities was to be created. Members of this committee were to be selected without regard to their political affiliations. We pointed out that some provision was also needed for external, independent technical evaluation, analysis and advice for the Office of Statistical Policy.

We recommended that a common statutory basis for statistical confidentiality be established and we drafted such legislation.

In order to ensure the durability of the organization it was recommended that the Office of Statistical Policy's mission and function be established in legislative form and be subject directly to the legislative, oversight and appropriations authority of the Congress.

Included in the report of the Project was an outline of a system for integrating statistical policy priority setting with the OMB budget process. This is a necessary protocol especially between two separate units. At the time this was done without a great deal of difficulty. I do not know what it would take today.

This would be a small unit of no more than 40 people. At the time that the Project report was written, we had in mind a substantially larger unit. That was not viewed as practical by the White House and the legislation transmitted to Congress in 1979 was for the smaller unit. This legislation plus a draft bill to establish a common confidentiality statute for the federal statistical system died without action in Congress at the end of 1980. In assessing the effect of the Paperwork Reduction Act of 1980, I have come to the conclusion that all that is really necessary for statistical coordination is a small unit in the Executive Office complimented by even smaller units at the department secretary level, where they are already mandated by the Paperwork Reduction Act. The last I knew some departments had implemented this with adequate personnel and resources and others had not. The point is that in a decentralized system, capability for coordination must exist at each decision level. The more that can be achieved at lower levels the less will be the capacity needed in the Executive Office. The small unit of professionals in the Executive Office must be of high quality -- experienced statisticians, economists, demographers and other types of analysts.

The heads of statistical agencies were nervous over the idea of a stronger coordinating unit in the Executive Office at the time that the Project report was being put together. It is interesting that subsequently several have said to me that the lack of credible statistical policy coordination today leaves the agencies quite exposed on a number of issues where they need support and protection. What is missing today is a credible central unit to identify national priorities and assist and complement the efforts at the department and agency level -- where most coordination goes on. Congress must take a strong hand in this. It should create an agreed upon focal point in the House and in the Senate from which to manage its role of oversight and protection of this relatively fragile function -- a function that does not fair well in competition with short-run, highly political activities. The durability of the central unit depends on certain of the recommendations of the Project and on the ability of the Congress to provide coherent oversight of the entire Federal Statistical System.

This view is cast entirely in the context of the assumption that the system will remain decentralized. To achieve a system or national performance from a very decentralized system requires a statistical policy coordination unit in the Executive Office to achieve that performance. There is an alternative -- the creation of one centralized statistical organization for the United States through merger of all of the multipurpose and large scale collections into one statistical agency. The coordination of national statistical needs is then the responsibility of that central statistical agency. I do not favor centralizing our system. But if we continue to fail in coordinating a decentralized system, some day in a crisis these problems may be resolved by centralization of all major statistical activity in the federal government.

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Federal Statistical Coordination Today: A Disaster or a Disgrace?

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SIR CLAUS MOSER, THEN DIRECTOR OF THE CENTRAL Statistical Office of the United Kingdom, once observed that "statisticians must suffer disasters as a hazard of their profession. But, they should never allow disgraces to occur." He paused at the puzzled expressions in his audience and added, "You know what a disgrace is?—It is a disaster that is allowed to continue" (Moser 1978). We now have such a disgrace.

Central coordination of federal statistical policy is dead. Its burial was arranged by the current political managers of the Office of Management and Budget (OMB) who, in early May 1982, dissolved OMB's Statistical Policy Branch. The pallbearers and grave diggers, however, include the last several decades of OMB bureaucratic leadership and OMB–White House political managers who, generally lacking any understanding of statistical policy or its necessity, fashioned the disasters that slowly stripped personnel and authority from the 1939 Division of Statistical Standards and its successors. Having had most of its capacity for the coordination of statistical policy destroyed, the surviving but greatly weakened unit was finally killed by OMB, an organization that may not even understand what it has destroyed!

Milbank Memorial Fund Quarterly/*Health and Society,* Vol. 62, No. 1, 1984
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Central Coordination of Statistical Policy

Let me make it clear what central coordination of statistical policy is, and, thus ideally, what has been lost. In a very decentralized statistical system, central coordination of statistical policy is managed by the office of the chief executive to achieve the desired system performance that cannot be attained by statistical agencies acting independently. It means that, under the leadership and direction of a central policy unit, various agencies "cooperate in the one or more aspects of statistical planning, design, collection, classification, or analysis" (Martin 1981). The central statistical policy unit will not execute the activity in many cases, but it bears the responsibility to see that it is done. To be specific, but brief, this includes:

1. *Coordinating and linking statistical policy with public policy decisions* at the highest level;
2. *Determining data needs* so that cooperative planning and budgeting of statistical output are possible, and anticipating information needs in time to result in the gathering of relevant statistics as well as avoiding gaps and duplicate data;
3. *Analyzing prospective uses of data* so that statistical designs are appropriate, and misuses of data are avoided;
4. *Maintaining the quality of existing federal statistics* through statistical audits and clearance, assuring the use of appropriate, state-of-the-art statistical methods in the design and collection of data;
5. *Assuring privacy and the confidentiality of statistical collections;*
6. *Protecting the integrity of statistical decisions;*
7. *Facilitating user access* to an extremely decentralized statistical system by assuring (a) the means to locate and retrieve relevant data, and (b) access to information on the nature and limitations of the retrieved statistics with a minimum of delay and at reasonable cost;
8. *Reducing respondent burden* through appropriate statistical design, standards, synthetic estimates, and greater use of administrative records for statistical purposes, as well as the application of statistical methods to administrative and regulatory records;
9. *Establishing standard concepts, classifications, and procedures* (a) to assure comparability and permit integration of data from diverse sources to serve multiple decision levels and diverse users, and (b) to provide

common data classifications and detailed building-block definitions allowing multiple uses to be served from single collections;

10. *Monitoring federal-state-local statistical systems* and facilitating linkages and coordination of federal statistical activities with the statistical activities of states, local governments, other countries, universities, private corporations, and so on.

While there are other activities and goals, if you have achieved all of these purposes of statistical coordination, you have also accomplished the final purpose: *the most efficient use of the resources of a very decentralized statistical system.* While we have never attained the full potential of statistical coordination, this is what we have lost.

The Decline and Fall of Statistical Coordination

Efforts to provide central coordination of statistical policy and standards go back as far as 1908. (From this point on I shall use the term "statistical policy" or "statistical coordination" in place of this long and awkward description of the central statistical function.) Successfully sustained coordination began with the 1933 Social Science Research Council–American Statistical Association Committee on Government Statistics and Information Services. On the basis of that committee's analysis and recommendations, the federal government established the Central Statistical Board in 1933. This independent agency was merged with the Bureau of the Budget (BOB) in 1939, when the BOB was transferred to the executive office from the Treasury Department. By 1947 the BOB Division of Statistical Standards had become a 69-person unit managing statistical policy coordination and forms clearance under the 1942 Federal Reports Act and the 1921 Budget and Accounting Procedures Act. This unit was composed of and led by statistical professionals (Duncan and Shelton 1978; President's Commission on Federal Statistics 1971).

Thirty years later, by 1977, the Bureau of the Budget had become the Office of Management and Budget and increased greatly in size, but its Statistical Policy Division had lost 40 of its original 69 positions. This personnel reduction of nearly 60 percent occurred in the face of an immense expansion in new statistical programs. In 30 years federal statistical budgets expanded tenfold in real dollar terms to about a billion dollars a year, while the number employed in statistical units and programs grew fivefold to about 30,000 positions (Bonnen et al. 1980). Regulatory and administrative record collections have grown several times faster than statistics. We now have a backlog of statistical standards work comparable to or exceeding that generated by the program initiatives of the Great Depression and World War II. Many public and private decision makers frequently express the need for standards to bring greater order to some of the important data bases they use. This need is especially obvious in energy, health, justice, environmental, natural resource, and various other regulatory policy areas.

The Beginning of the End

The federal bureaucracy has been under pressure at least since the Nixon Administration's effort to exclude the bureaucracy from policy making by centralizing policy decisions and by increasing the number of political appointees, often at the expense of senior civil service positions in an agency. Subsequent administrations have added to this politicization of the bureaucracy and displacement of experience—all too frequently with political appointees lacking in both relevant technical skills as well as national political experience. Criticism of bureaucrats and controlling the bureaucracy have become the common coinage of political campaigns.

In early 1977 the new Carter White House declared war on the bureaucracy it had captured. Before he had any understanding of the operational requirements of the White House and executive office, the president ordered a reorganization and reduction in White House and executive office personnel. Faced with a White House directive to reduce OMB personnel numbers, OMB's reorganizers decided that statistical policy and several other activities from the "M," or management side, of OMB were expendable, since they did not "bear a close relationship to the work of the president" (Office of Management and Budget 1977). They shattered institutional arrangements that had prevailed for three decades by transferring the central statistical policy functions (and 15 positions) from OMB and the executive office of the president to the Department of Commerce. OMB retained the forms clearance function (14 positions), the activity of the Statistical Policy Division with the most bureaucratic and political clout.

Similar OMB–White House decisions between 1947 and 1977 had earlier stripped personnel, institutional access, and authority from central statistical policy. These decisions led inexorably, "disaster" after "disaster," to the current "disgrace." No direct desire to "do in" statistics or statistical coordination was exhibited in the 1977 decision. In fact, the director of OMB, persuaded of the long-run importance of statistical policy, initially reversed the reorganization decision, but under pressure to reduce OMB's size he eventually succumbed. Thus, statistical policy, with its low political sex appeal, long planning horizons, and low short-run payoffs, when ranked by the crisis-driven values of most political decision makers, was found to be less important than the activities supporting budget and other policy decisions (Berman 1979, 46–47). These latter are the activities and decisions where day-to-day political pressures are most intense and upon which the OMB's performance is judged in the White House. With very few exceptions, whenever push has come to shove in OMB, statistical policy has lost.

Almost immediately, however, the Carter administration decided to examine the problem of statistical policy, and it asked me to direct a somewhat misnamed "Statistical Reorganization Project." The title is a misnomer in two senses. Statistical policy had already been reorganized—out of OMB. The project might better have been called the "Statistical Policy Recovery Project." Since it was sponsored by the regular "M" side of OMB (and not the new president's Reorganization Project staff), philosophically it was a management improvement project.

The purpose of the project was to explore the current problems and functions of statistical policy, to recommend the most appropriate location for the statistical policy office, and to design the institutions and recommend the resources necessary to obtain a coordinated national-level performance from a very decentralized statistical system. This we did in 1978–1979.

The question that proved most difficult was where to place responsibility for central statistical policy. The general options were to (a) put it back in OMB, (b) leave it in the Commerce Department, (c) put it somewhere else outside the executive office, or (d) establish it as a separate agency in the executive office of the president. Conventional wisdom would have returned statistical policy to OMB.

However, it had not fared well there. As our project report (Bonnen et. al. 1980) put it:

> Sound statistical policy requires long-time horizons for highly technical coordination and planning, and a corresponding measure of freedom from short-run political and economic events, of whatever significance. OMB's primary function—presidential budget development and oversight—involves immediate, often crisis-driven, decisions of great political and economic significance, which dominate OMB's internal agenda and resource priorities. Statistical policy was not perceived as important in such an environment, was not understood, and slowly eroded in personnel and institutional strength.

The fact is that OMB is no longer the same environment in which the coordination of statistical policy and standards began. OMB has been thoroughly politicized since the early 1950s. It has been transformed from an objective servant of the institutional presidency into a highly political servant of the personal presidency (Berman 1979, 100–125). In the process, it surrendered not only its reputation and capacity for objectivity but also its ability to consider the longer and larger view. Today it is a crisis-driven, political enforcer of the president's personal priorities. Organizational separation of these incompatible functions has repeatedly been recommended in the past (Berman 1979, 85–88, 105–10). In interviewing experienced veterans of the executive office, I asked a former senior OMB official for his opinion on why statistical policy had slowly atrophied in OMB. He responded, "When you are up to your armpits in alligators you don't worry much about statistics."

After an exhaustive examination of alternatives, the project recommended establishing a separate agency in the executive office of the president. This option, contrary to our initial expectations, turned out to be "the least worst solution" in a terrible tangle of tradeoffs between second- and third-best solutions to specific problems, which allowed the final combination to exclude all known fatal flaws. The proposed legislation also involved a substantial strengthening of the institutional capacity of statistical policy. This, of course, did not happen. Executive office agency leadership, federal statistical agencies, the cabinet departments, and the White House were persuaded, but we got to the Congress late in its 1979–1980 session and were unable to convince the appropriate committees to act on our solution.

What did happen was that the statistical policy functions were returned without any institutional improvements or safeguards to OMB in August 1981 by the Paperwork Reduction Act of 1980. The functions came back, moreover, into a vastly different environment, the Office of Information and Regulatory Affairs (OIRA). Statistical policy was now expected to function in a regulatory agency run by regulatory lawyers and economists. Besides statistical policy, the Office of Information and Regulatory Affairs manages seven other functions, at least five of which have more immediate political significance than does statistical policy. These other functions of OIRA include: (1) clearance of forms, (2) the paperwork budget, (3) regulatory policy (i.e. deregulation), and, in addition, government-wide policy and oversight for (4) administrative records, (5) privacy of records, (6) sharing of records, and (7) regulation of the acquisition and management of automatic data processing (ADP) and telecommunication facilities. Functions (1), (2), (3), (6), and (7) attract more intense political interest than statistical policy usually does. Even with the best of intentions the odds were low that statistical policy could be made to work in such an environment. We drew that conclusion in the final report (Bonnen et al. 1980) of our project, well before the Paperwork Reduction Act had passed. Congress did not accept our analysis or share our concern. Unfortunately, subsequent events proved we were right.

The negotiated transfer of personnel from the Commerce Department to OMB in the Reagan administration was a long and demoralizing experience, extending from February to late August 1981. The conditions of return changed almost weekly, varying from returning the entire unit or only part of the unit to returning positions but none of the existing personnel. One early prescient plan proposed to scatter the statisticians around the Office of Information and Regulatory Affairs, thus avoiding the necessity for providing a statistical policy unit within OIRA. It ended, finally, in August with the establishment of a Statistical Policy Branch in OIRA and the return of only 15 of the 26 people (25 positions) who had composed the Office of Federal Statistical Policy and Standards in the Commerce Department. Left behind were 10 people—among whom were some of the most experienced, longtime members of the unit—and the unit was downgraded from the separate division that left OMB to a branch.

In OMB, 4 of the 15 positions were immediately assigned to a new White House indicators project leaving 11 to manage government-wide statistical policy. The White House indicators project was designed to provide a computerized, interactive capability for background briefing in current issues for the White House. Though a good idea, it faded away through lack of White House use. By early February 1982, 3 of the original 15 people transferred to OMB had departed, including the unit's director. This left something on the order of 2 secretarial and 10 statistical positions (11 professional statisticians, 3 of whom work part-time) with which to conduct government-wide statistical policy, run the indicators project, and support forms clearance, plus all other functions of the Office of Information and Regulatory Affairs.

So few professionals cannot be expected to cover a statistical system as large and as decentralized as ours, especially when their biggest problem is persuading OMB that statistical policy is important and requires more, not fewer, resources and attention. The unit was in a situation where all the senior management roles in statistical policy had turned over, and after a four-year absence, statistical policy needed to reestablish complex and informal institutional linkages within OMB.

Two of the most important communication devices for statistical policy were discontinued. The Statistical Policy Coordinating Committee, the only government-wide forum for statistical policy, on which all cabinet departments, the Council of Economic Advisers, the Federal Reserve Board, and OMB were represented, was eliminated in August of 1981 at the time of the transfer to OMB. A few months later, in January 1982, the *Statistical Reporter*, a highly valued monthly publication, was dropped without warning or evaluation. For over four decades this publication served as an instrument of communication and coordination and as a forum for the widely scattered, often professionally isolated government statistician. Its net cost was $18,600, its benefits many times that (see Reuss 1982).

The End

The final ax fell in April 1982, when the director of OIRA announced to his staff that the Statistical Policy Branch would be abolished and statistical personnel distributed to other branches. An after-the-fact press release was issued in May. This OIRA decision had been reviewed and approved by OMB's director and deputy director. It was made after OMB had posted the position of director of the Statistical Policy Branch and had asked the American Statistical Association (ASA) to recommend names for consideration. The director of OIRA had met with the ASA Standby Committee on Appointments to Senior Federal Positions for its suggestions in March 1982, just four weeks before he announced the dismantling of statistical policy.

If one is to believe a report in the *Washington Outlook* column of *Business Week* (1982), the unfortunate appearance of bad faith is the result of the intervention of Vice President Bush, who pressured OMB to devote more manpower to revision of "100 targeted regulations" in the administration's deregulation campaign. The report states that business had complained about OMB's slow progress and that as a consequence of the vice president's efforts, "a number of analysts and statisticians are being shifted in the office of Christopher DeMuth, head of OMB's regulatory affairs shop. And OMB aides have been directed to expedite the review of regulations and to spend more time in direct contact with regulatory agencies."

This is an old story in OMB's management of statistical policy; we see again the pressure on OMB division chiefs to do more things with too few people (Berman 1979, 102). This combines in a devastating way with OMB's incomprehension of the connection between the quality of data and the quality of decisions, and it is then made lethal by OMB's indifference to its ultimate responsibility for the quality of federal data. That indifference today verges on gross negligence.

The reason given in OMB, I am told, for disbanding the Statistical Policy Branch is that it was ineffective. I agree that increasingly it was. How possibly could the bruised, decimated band that survived the last decade or so of OMB–White House decisions be fully effective? Even if it was not OMB's intent to run off the leadership and discredit and demoralize those who remained, this is their accomplishment.

Of course, OMB says it has the same continuing capacity to coordinate statistical policy because it still has the personnel. Indeed, OMB alleges that statistical personnel are being better used as a result of the reorganization of OIRA. But to what end? Certainly not statistical policy.

Look at the disposition of personnel. Of the original 15 positions transferred back to OMB in 1981, 3 disappeared as people left for other jobs and were not replaced. Four statisticians are now assigned as desk officers in the paperwork and regulatory policy wars and are lost to government-wide statistical policy. A "desk officer" is responsible for all 8 OIRA functions (statistical policy, clearance, burden budget, ADP, records management, privacy of records, records matching, and regulatory policy) for a specific agency. The 5 other statistical positions were assigned to regulatory analysis and statistical policy. These 5 positions are filled by 6 statisticians, only 3 of whom are full-time. This comes to 4.5 full-time statisticians. Given OIRA's primary mission to deregulate and reduce regulatory complexity and costs, and given the great pressure from the White House and the vice president for action on revision of regulations, it will be remarkable if many of these remaining positions are long devoted fully to statistical policy—even with the best of intentions. The position of chief statistician and director of the unit was left unfilled for 18 months until finally, in June 1983, following direct instructions from the Congress to fill the position, OMB appointed a private economic consultant as chief statistician. Without a separate statistical policy unit, no more personnel than are left, and lacking any real understanding and support from OMB, it is difficult to see how this appointment will change either the capacity for statistical policy or its performance.

Even if the positions are used as specified, how long does OMB expect to keep skilled statistical analysts in jobs that are only partially statistical or where there is no real commitment to statistical policy? This is such an abuse of professional skills that as soon as these individuals can find jobs commensurate with their skills, they will leave OMB. How then will OMB recruit replacements with the high quality and skills necessary for effective statistical policy? This is precisely why the Statistical Reorganization Project predicted the demise of statistical policy if it were placed in the kind of organization envisioned by the Paperwork Reduction Act of 1980.

Thus, it took three actions to produce this final mess. The first was the 1977 transfer out of OMB, which weakened the institutional authority of statistical policy by removing it from the executive office–White House policy and reports-clearance machinery. The better resource treatment and understanding of statistical policy in the Commerce Department could not compensate for this loss.

The second action was Congress's failure in 1980 to accept the administration's proposed separate Office of Statistical Policy (in the executive office) and the subsequent inclusion of the statistical policy function in the Office of Information and Regulatory Affairs established in OMB by the Paperwork Reduction Act of 1980. Stripped of its earlier institutional authority and policy access by the move to the Commerce Department, statistical policy was then returned to OMB by Congress without any thought for institutional safeguards, and was embedded in a regulatory environment run by political appointees who had little or no understanding of statistical policy or its necessity. Congress shares the responsibility for this failure. It thrust into OMB a set of "information management" functions with a clear directive to OMB to improve its performance, without recognizing the great differences between those functions and without insisting that an adequate staff be recruited for the purpose. Excess capacity rarely exists in OMB since OMB always prefers to manage its agenda, with each 100 of its staff members working 55 hours a week rather than with 137 working 40 hours a week. Most presidents are politically sensitive about the size of their staff in both the White House and the executive office and periodically try to pare down the real or apparent size. OMB, as the president's policy policeman, budget naysayer, and enforcer of personnel reductions, believes it must set a good example by remaining a lean organization.

The third action was then almost inevitable. The Reagan OMB, not to be outdone by Carter's, proceeded step by step to dismantle what little was left of statistical policy. These three actions in a period of five years were all the kind of triumph of form over substance that earns continuing public skepticism of our governing institutions.

The greatest industrial nation in the world with the largest, most complex society and economy now lacks effective capacity for central coordination of its statistical activities. This is a crippling loss since ours is the most decentralized, if not fragmented, statistical system in the industrial world. Alone among the industrial countries and for the first time in fifty years, the United States is without credible statistical leadership above the level of the agencies. When the slowly rising tide of disorder in statistics begins to undermine and disrupt national decisions, I want it remembered that the final act in this national disgrace is an OMB accomplishment. Who can possibly believe any longer that statistical policy belongs in OMB?

Central coordination of statistical policy is dead in the United States. It has been interred in OIRA, OMB's tomb of the unknown statistician.

What Difference Does It Make?

The immediate serious threat is to integrity. Otherwise, in the short run the loss of central coordination will probably not create many immediately obvious problems. Past investments may carry us for a while. In the long run, however, we are in serious trouble in all major functions of statistical coordination.

In a statistical system as decentralized as ours, significant central coordination is essential if we are to have national-level statistics that are of sufficient quality and relevance to sustain national decision needs, both public and private. The final dismantling of the central coordination of statistical policy in the United States by the current administration has already had the effect of reducing the commitment of individual statistical agencies to coordination. Why should an agency make any effort beyond its mandated mission when real budget resources are declining and the White House does not care about coordination? This disappearance of political commitment to statistical coordination creates a negative environment for any effort to provide multipurpose national statistics.

There is an immediate threat to the integrity of federal statistics. To begin with, few realize today the extent to which statistical formulas and price indexes are now used by Congress to allocate public resources. Two recent studies establish this clearly. In fiscal 1979 more than $122 billion or about one-fifth of total federal budget obligations were committed through statistical formulas (see Emery, Campbell, and Freedman 1980). About 30 percent of all budget expenditures ($195 billion) were automatically indexed to the Consumer Price Index (CPI) in fiscal 1981. In addition, another 27 percent ($177 billion) were indexed less directly to the CPI or to some other index (DeMilner 1981, xiii, 22, 25). While these studies are for different fiscal years, and one is based on obligations, the other on outlays, conservatively at least one-half of the federal budget, and depending on how you view it, as much as three-quarters of the budget is now allocated through statistical formulas or price indexes. The rate at which this practice and its impact have grown is phenomenal. Up through the mid-1960s the use of statistical formulas for federal budget allocation purposes was quite limited. In 1966, only 2 percent of the budget was automatically indexed (DeMilner 1981).

This growing, intimate embrace between statistics and public policy decision making has greatly increased the significance and decision value of the statistics we produce. It also has added to the complexity of the problem of coordination of statistical policy and has increased by several orders of magnitude the need for integration of various data bases as decision making has become more interactive and complex. Most importantly, it greatly compounds the problem of protecting the integrity of federal statistics. In short, it increases the need for stronger central coordination.

With one-half to three-quarters of all federal expenditures allocated through indexes or formulas, a very substantial part of our most important statistics have the potential of being held hostage to political ends because of their visible and direct impact on politically important decisions. When the consequences that flow from those statistics are viewed as important by some politically potent interest group, the political temptation to manipulate those statistics or, more commonly, to prevent needed conceptual or measurement revisions, is often difficult to resist. Individual agencies can be quite vulnerable. With the loss of effective statistical policy oversight from the executive office, this threat is even greater. Who now will support the agencies when issues of integrity arise?

Indeed, with the authority for central coordination of statistics in the hands of a regulatory policy group, one of the open questions is whether that authority may not itself be used some day to impair the integrity of the statistical system. One of the basic experiences learned in all statistical systems is that it is dangerous to mix statistical policy decisions with the politically radioactive regulatory policy decisions. These two universes mix like oil and water, almost invariably to the detriment of the integrity of statistical collections.

In the future, without an organization responsible solely for central statistical policy independent of regulatory matters, who will believe that a statistical policy decision made in OMB has statistical integrity? There no longer are any institutional safeguards or formal procedures to protect the integrity of statistical policy decisions because these matters are now all intimately intermixed with regulatory policy. We are already in trouble.

I should not leave the impression that we have declined either slowly or suddenly from some golden age of statistical coordination. Such an age never existed. The effectiveness as well as the fortunes of the OMB statistical policy unit have gone up and down over the years. Never has the ideal or the full capacity of statistical policy coordination been realized. While there have been many substantial, even brilliant accomplishments, there are many continuing unresolved problems and relevant but unaddressed goals. Much of this can be attributed to the lack of support in OMB, the White House, and Congress as recounted here. The rest can be attributed to the resistance of statistical agencies to the coordination of their activities and to periodic inadequacies in the performance and leadership of the central coordinating unit itself. This, at least, is the general view that developed from interviews the author had in 1978–1979 with a rather large number of experienced statisticians who were long-time observers of or participants in federal statistical activities.

I also do not want to leave the impression that OMB is currently doing nothing on statistical policy. About 4.5 professionals are, for now, working most of the time on statistical matters. The Federal Committee on Statistical Methodology continues to work on several projects. These include, among others, a study of interagency contracting of statistical product, a review of agency policies on revision of time series, as well as a study on improving the quality and comparability of the many varied industry codes used in government statistics and administrative records. The respecification of Standard Metropolitan Statistical Areas (SMSA) is under way based on the revised SMSA standard and the 1980 population census. Work is being done on user access. A belated effort is being made to coordinate agency redesign of household surveys following the 1980 census. Most of the statisticians working on these issues come from agencies other than OMB.

The government-wide confidentiality legislation developed by the President's Statistical Reorganization Project in 1978–1979 has been revived by OIRA and is being considered for submission to Congress. This legislation in its original form held great potential for improving the quality of federal statistics while reducing budget costs. The legislation would permit authorized statistical agencies to share microdata for statistical purposes in developing survey and census frames and in cooperating to produce integrated data sets. For most agencies it also would substantially strengthen the legal basis for the promise of confidentiality to respondents. It would also greatly enlarge the ability to reduce respondent burden through more comprehensive control of the incidence of a given respondent falling into repeated surveys of the same universe. In the revised version circulated by OMB in late 1982, some of the most important features and benefits of the original concept were discarded.

In any case, getting this kind of legislation through Congress requires the support of the private sector. Since great power is concentrated in the legal right to authorize the sharing of records, business views that authority as an insupportable risk unless it is lodged by legislation in a politically neutral role that is highly visible and accountable and is invested with a public expectation of great integrity.

By destroying any recognizable statistical policy unit, thus eliminating the possibility of a credible chief statistician, OMB has unwittingly destroyed the primary political prerequisite for passage of confidentiality legislation. Where can they now place the power to authorize record sharing? In the director of OMB? Impossible! This is one of the most political positions of policy advocacy in one of the most politicized agencies in Washington. Assign responsibility to the director of the Office of Information and Regulatory Affairs in OMB? Worse! Here you are putting the power to force the sharing of data in the hands of someone who is primarily the regulatory policy officer for the president. Mixing of regulatory policy and statistical policy authority destroys the perception of political neutrality in statistical policy decisions while grossly undermining the reality. Business would view this as putting a fox in the hen house to protect the chickens.

OMB appears oblivious to other effects of dismantling the statistical policy unit. There is now no credible national-level focal point where users and other affected parties can express nonfederal public and private data needs. While this kind of access may not sound like much, it combines in a lethal way with the OMB's 1983 budget push to eliminate all federal data collection and processing that does not serve federal policy makers. The director of OIRA was recently quoted as follows:

> In the past agencies collected much greater detail than was needed for national policymaking purposes. It is understood now that agencies justify their data collecting programs to OMB in terms of the needs of federal agencies alone, not of states, local governments, or private firms for their own marketing purposes (*New York Times* 1982).

This appears even to exclude the Congress and exhibits OMB's current confusion over the nature of and distinction between public and private goods. It also exhibits an ignorance of the fact that many, if not most, of the early federal statistics collected were for private sector uses. Why should this be? The fact is that many nonfederal uses of federal statistics are in the national or the public interest and in some cases involve data only the federal government can collect. OMB has grossly confused federal bureaucratic needs with both national and public needs for data. The fundamental statistics of the nation are in harm's way.

With some exceptions the departmental pressures on most federal statistical agencies are such that when budgets are cut the agencies tend to sacrifice small area data, subnational samples, and the activities and commodities that are minor elements nationally. This is explicit in the decisions many agencies made in facing reduced real budgets in 1981–1982. It does not take much foresight to see how disruptive this will be to any new or old federalism, especially with the federal government defaulting on its responsibility for nonfederal uses of statistics.

With little or no ability and even less will to retain statistical capacity in OMB, even the effort to reduce the burden of paperwork on respondents is likely to suffer. Statistically unsophisticated staff will often not even see the duplication, or if they see it they will not know how to approach its reduction effectively through redesign that achieves multiple goals. Without statistical sophistication even the accurate measurement of the resource costs of respondent burden is not possible. The burden budget meat ax will progressively disorder statistical and other data collection priorities.

Trends That Compound Statistical Problems

There are several other trends that have already resulted in serious failures in decision making. Disorder is growing in the political and policy-making process. When combined with the effective elimination of central statistical coordination, these trends increase the chances that we will experience fundamental failures both in statistics and in statistical policy.

Statisticians, in their professionalism and admirable effort to maintain the objectivity of the statistical enterprise, tend to abhor politics and most of its works. This frequently leads to a philosophic position and behavior that precludes even thinking about the relationship between statistical matters and public policy with its political base. Today no agency head can long ignore politics. We as a profession need to think seriously about how statistical institutions and practices can be modified to manage with effectiveness and with integrity the growing direct use of statistics in politically sensitive decisions. We are trapped in an intense dilemma. Statistics are far from neutral in their political impact. Nevertheless, we must convince politicians that statistical policy must be made in a politically neutral way to protect the integrity and, thus, the value of federal statistics. The relationship between statistics and politics has grown too important and intimate to ignore.

The various trends and problems briefly discussed in this and the next section are in part sifted out of the author's personal experience of over twenty years as an analyst and participant in, as well as a student of, federal policy processes. These trends and problems also arise from analysis done by the President's Reorganization Project for the Federal Statistical System and from interviews the author and others held with senior policy makers in 1977–1978 about their uses of statistics and perceptions of the problems of federal statistics. Some are also based on published research on the political and policy institutions and processes (see Auspitz 1982; Caplan, Morrison, and Stambaugh 1975, 23–40; Fairlie 1980; Lynn 1978, 12–81, 126–44; Nie 1982; Polsby 1983; Sundquist 1980, 531–63).

The first of these trends is a growing complexity of society and the effect this has on policy making and ultimately on statistics. Since World War II, the society and economy of the United States have become very much more complex, specialized, and interdependent. Their various sectors interact, each sector creating many kinds of conflicts and effects external to itself. This, in turn, has led to a complete transformation of the role of government in society. In responding to these growing problems and conflicts, government has intervened in a pervasive manner, with immense impact and not always wisely. Federal policy decision making has also become far more extensive, interactive, and complex. The distinction between public and private sectors has become blurred. As a result of this greater complexity and interdependence, national policy decisions today are decisively dependent on quantitative measures to identify and understand complex problems, problems that have gotten beyond the capacity of "seat-of-the-pants" decision making. In addition, since many problems now interact with one another,

> policy decisions more frequently involve choices that cut across present departments, government policy decision structures, and their data bases. Growing numbers of these crosscutting issues involve so many diverse conflicting participants that more and more executive branch decisions are being forced to the White House for resolution (Bonnen et al. 1980).

The crosscutting issues that are forced to the White House for decision involve tradeoffs between conflicting goals and interests. Examples include conflicts between energy development and environmental and resource conservation, between agricultural trade policy and national security, and finally between the broad goals of welfare policy and the various conflicting effects of different specific programs such as aid to families with dependent children (AFDC), low income housing, and food stamps. In the latter case, the Survey of Income and Program Participation, which was dropped from the president's 1983 budget, is designed to provide objective data for analysis to establish where social benefits might equitably be modified. It would provide ammunition to defend such decisions. Congress has wisely restored this and several other cuts in statistical budgets.

Resolution of broad, crosscutting policy questions frequently creates the need for new statistical data or requires complex new combinations of older data. These data requirements were difficult to meet under previous statistical policy institutional arrangements. Now, without the commitment to and the capacity for central coordination, it will be nearly impossible to deal with them effectively. Yet, meeting such data requirements is essential if national policy decisions are to be based on a firm factual foundation.

Another growing problem is the changed attitude of modern political appointees and elected officials toward statistics. In the 1930s there were very few reliable statistical data bases, and respect for good statistical data was generally high. Much federal effort went into improving the scope and quality of public policy data bases. Today we have an enormous range of statistical numbers, and many policy makers have come to view them as if they came from the horn of plenty or were Elijah's gift to the widow (1 Kings 17:10-16). That is, with millions of numbers around they have the comfortable feeling that statistics arise without effort from an inexhaustible source—a source from which, at the last minute, they can extract data to suit any information need, however specialized or unique. Such behavior guarantees frustration. Without conscious statistical planning at all levels of decision making, this failure and its psychological self-perpetuating behavior will continue to prevail. The planning to provide statistics involves a substantial lead-time.

This misunderstanding of the nature of the process from which statistics arise is compounded by a growing negative perception of statistical agency performance. Many policy makers perceive statisticians and their organizations as unresponsive, producing lots of unused numbers and chronically unable to provide appropriate numbers when called upon. Therefore, they ignore statisticians and distrust statistical agencies. Statistical agencies and statisticians are at least partially responsible for this perception and, thus, can do something about it.

Most policy makers also demonstrate that they have little notion where most of the numbers come from in the decision memoranda that their staff provide and upon which decisions are based. While they may have no negative attitude toward statisticians, they are totally innocent of any statistical knowledge or knowledge of the statistical system. In short, there is little appreciation among many policy makers of the problem of providing statistics or even of the need for statistics. This attitude is not new and is not characteristic of all policy types, but it is, in my experience, characteristic of a large proportion of policy makers. This problem is compounded by and related to two other trends.

Even more than in the past, the American people today are sending amateurs with no prior national experience to Washington. These Washington amateurs have learned to win elections but do not have the skills or experience to govern the nation. This decade-old trend arises from a far more profound distrust and disillusion with government caused by the abuse of power during the Vietnam War and the Watergate activities of the Nixon White House. This has been compounded by the explosive growth of federal regulation and a growing resentment of excessive intrusion of the federal government into everyday life. Repeated exposures of scandals and corruption in federal, state, and local government have not helped. Americans have always tended to view experienced politicians as dishonest, conniving types who do not deserve to hold office and so we turn them out. Never before in this century has the phenomenon been so intense and general. Candidates for offices from county commissioner to president run against government and its "evil" bureaucracy. The amateurs we elect, in turn, fill the congressional staffs and executive branch with political appointees who are also Washington novices. This, perhaps, is not so bad, if they are capable, for they eventually can learn enough about their decision-making environment to be effective. After all, you have to start somewhere. The problem is that the incidence of amateurs in Washington has become so great that there are too few real political pros around today from whom the amateurs can learn. Competence and stability of government erode. Policy direction is erratic. This "government of strangers" invariably distrusts the bureaucracy, which has much of the knowledge necessary to govern; this means they are unable generally to manage (control) the bureaucracy and inevitably fail in governing. Controlling the bureaucracy and destroying it are two different things that have been greatly confused since 1977.

However, another trend now appears to make learning or factual knowledge unnecessary. An increasing percentage of those who end up in appointed or elected office today are so ideological that they appear to need no factual knowledge for decision making. Increasingly, we have what Goethe described as the worst situation in the governance of a state—ignorance in action. When facts are called for, it is only to provide self-serving support of ideological conclusions. Both of these trends reduce the proportion of elected and appointed officials with sufficient experience or knowledge to appreciate the role that statistics and objective analysis can and should play in policy and decision.

The Integrity of Statistics

All of these trends in politics and policy create a difficult environment for statistical policy and make even more dangerous another problem—the growing threat to the integrity of federal statistics.

> Statistical policy and public policy decision making find themselves today in an embrace, the intimacy and immediacy of which are very new. This embrace is enforced by the growth of government intervention in society and the increasing interdependence of economic and social sectors. . . . [This] in turn causes public policies to be more interactive and also to demand more immediate decisions. The consequence is that statisticians can no longer do their quiet thing quietly (Bonnen 1981).

This occurs at a time when individual agencies are made more vulnerable by the extensive use of statistics to allocate resources, as well as by the rising level of raw political ideology driving the decision process. Now we even lack a statistical policy office to back up the agencies in issues involving integrity.

It is worth asking why politicians have chosen to move half to three-quarters of the federal budget into automatic, or nearly automatic, statistically determined allocation processes (DeMilner 1981; Emery, Campbell, and Freedman 1980). In the 1950s, policy makers extracted a substantial amount of political power from the direct annual control of these decisions. This shift in decision style is not a search for objective decision making. Rather, it is a political flight from direct responsibility for public decisions. Beside the growth in statistics to allocate resources, the element that is different from the past is the instability of the political and policy decision process, which leaves congressmen quite vulnerable as individuals. This has complex multiple roots but is due primarily to the decline of institutional power in the party and in the management of Congress, combined with the growth of single interest lobbies (Auspitz 1982; Fairlie 1980; Nie 1982; Polsby 1983; Sundquist 1980). Federal expenditure decisions have become zero-sum games in which, if half-a-dozen conflicting interests are focused on a decision, the politician will usually make more enemies than friends no matter what decision is made. The effect is to make every allocative decision controversial, unstable, and politically costly to politicians, often no matter which way the decision goes; every decision becomes a no-win situation. The annual allocation of federal expenditures has become so politically costly that politicians attempt to push these decisions away from themselves by establishing "automatic" statistical procedures for making political decisions. It is politically safer and more expedient to use statistical formulas and indexes to avoid annual brawls. Once the formula or index is established in law, this flight from political responsibility dumps many political conflicts onto the statistics and the statistical agency involved.

As long as politicians are rational, wish to be reelected, and face no-win decisions in allocating federal expenditures, they will use statistics to allocate those expenditures. Politicians are just trying to survive in the midst of the fragmentation of our political institutions and of federal decision making. There has been a steady erosion over the last three decades in the stability and authority of public institutions, including the political parties, the executive branch, and the Congress (Auspitz 1982; Fairlie 1980; Nie 1982; Polsby 1983). This has led to a decline in the capacity for making public decisions and, most importantly, in the capacity to make them stick (Sundquist 1980).

> The hierarchical structure of government and the stable political coalitions formed after World War II at one and the same time limited and protected all government agencies. There were things good and bad upon which one could depend in dealing with Congress and the political process. For at least a decade, however, institutional instability and disorder have increasingly characterized the forces that affect the policy decision process. One is continually buffeted in one direction and then another (Bonnen 1981).

Single interest groups have proliferated and engage in an unending war in which there is no final resolution. Permanent coalitions do not evolve. The day-to-day processes of politics and of governance have become unstable while the authority in political leadership roles has been weakened by party and congressional reform which has opened these institutions to greater voter and interest-group influence, and diffused their power of decision. As a consequence, individual politicians have been made quite vulnerable. Today, neither the party nor the leadership in Congress can protect individual members from destructive exposure in the conflicts between single-interest groups. As a result, the environment of government is becoming much more politicized, unstable, and lacking in accountability (Auspitz 1982; Nie 1982; Polsby 1983; Sundquist 1980). Consequently, "statistical agency leadership today is on its own in a stormy environment and with more cannon loose on deck than anyone else has had to face in this century" (Bonnen 1981). It is not likely that this will change much in the very near term.

Politicizing statistics only rarely involves "cooking the numbers." Data are politicized whenever technical statistical decisions and their timing are removed from the control of statisticians. This is a large class with many examples where the temptation to tamper has become too great to resist. Statistics have never been widely or well understood. Today, however, they are much more broadly used in a governmental environment that has become so politicized and ideological that factual descriptive capability and objective analysis are eroding. Romantic imagination and wishful thinking increasingly dominate decisions. The Reagan administration did not begin this trend but it is now also contributing toward greater politicization and ideological conflict in governance.

The protection of the integrity of statistics and their use has its foundation in the integrity and courage of the statisticians, demographers, economists, and other analysts who design and produce statistics. Since isolation from the policy process is no longer possible, new institutional safeguards to integrity should involve stronger appropriate processing and publication standards, insistence on publication of methods, a well articulated legislative mandate for individual statistical agencies, a strong common confidentiality statute covering all major agencies, high visibility and multiple accountability for statistical policy, a central unit for statistical policy and coordination with statutory responsibility including the integrity of federal statistics, and a single committee in each house of Congress for legislative oversight of multipurpose statistics and government-wide statistical policy and priorities.

The actors who care enough to protect the integrity of statistics and their uses are usually professional statisticians, economists, and other professionals responsible for major policy decisions or advisory activities, especially those decisions and activities that depend on some form of forecasting or specialized modeling. Statisticians care because their professional integrity is at hazard. On far too many occasions this is the only obstacle that stands between the integrity of data bases and politicization. Today, most economists are trained in a deductive tradition. Consequently, not many economists would be as sensitive to problems of data as they are if it were not for the discipline of forecasting, for other specialized modeling, and for the existence of the national income accounts. We owe this integrating analytical capacity not just to the theorists who created these conceptual structures but also to people like Arthur Burns, George Jaszi, Wassily Leontief, and many others working in the tradition of Wesley C. Mitchell, who operationalized the abstract concepts and made measurement possible. These economists understand the empiric and know the importance of being careful about one's numbers. It is very difficult for statisticians to communicate or collaborate with those who do not care and are not careful about their numbers.

The Behavior of Statisticians

Before leaving this topic, it is also worth asking ourselves as statisticians if in any way the behavior of statisticians has contributed to the perception by policy decision makers that statistics and its coordination are less than useful. I believe it has. I would suggest three possible kinds of behavior to think about, and on which we might work to change these perceptions. There are undoubtedly others. The first is the failure to recognize the important tradeoff between accuracy and relevance. Too frequently, statisticians expend all their energy on reduction of measurement error, behavior that can lead to zero relevance, either because it takes too much time to reach the accuracy goal or because accuracy is associated with a format or product that is not as relevant. Even in the reduction of measurement error there is a tendency to focus on sampling error and to ignore other forms of measurement error. Not enough effort is spent on bias in sampling and measurement, on conceptual inadequacies and obsolescence, and on problems in operationalizing concepts. This behavior is not limited to federal statistics. As John Tukey (1979) has pointed out, statisticians are quite as responsible for the relevance of numbers as for their accuracy.

A second behavioral dimension that I would point to is the degree to which we sometimes isolate ourselves from the policy process in our attempt to protect the integrity of statistics. If the policy environment is as interactive and the embrace between politics and statistics is as intimate as I have alleged, protecting integrity with isolation is a game that is over. We must learn how to work more effectively with politicians, political appointees, and their staffs. Isolation may in the short run protect statisticians, but it will not protect statistics because such isolation no longer really exists. The only solution today is multiple accountability, standards, and high visibility for the statistical policy process. Isolation often worked in the past and it has led to a statistical tradition filled with confrontation, resignations, and many colorful stories. It will take more today to maintain integrity.

Finally, a third behavioral pattern that is quite closely related should also perhaps be examined. That is the very strong institutional reluctance of multi-purpose statistical agencies to adjust their product, its mix, or its integration. I realize nine out of ten user complaints or suggestions make little sense, since users commonly do not understand how the data are designed or produced. Consequently, we often grow callous and insensitive to that tenth suggestion or request. This is closely related to former census director Vincent Barabba's insistence that we need to do a better job of analyzing and marketing our product.

These are problems on which I think we need to work, if we are to change policy makers' perceptions of statistical agencies. These are also problems that are going to be much more difficult to manage without effective central coordination of federal statistics. We now have no place to stand even to discuss or evaluate these kinds of problems, which are rarely limited to a single agency. The occasions as well as the rationale for routine, systematic relations among statistical agencies have been destroyed by OMB.

What Should We Do?

This is not an unexamined subject. We do know how statistical policy and coordination should be organized. After more than 40 years of experience we certainly know what its functions are and how it should be done.

The Organization of Statistical Policy

First, I submit we know that central coordination of statistical policy must be lodged in the executive office of the president with a legislated mandate, if it is to function effectively. Second, while it belongs in the executive office, it is equally clear that it does not belong inside OMB. OMB would only kill it again. Third, you cannot expect to assign 200 statisticians, economists, or anything else to the executive office of the president. Fourth, without a unified focus for legislative oversight of all federal statistics in the Congress, any executive branch structure for statistical policy will lack durability and effectiveness. Let me speculate on the general form this suggests for the coordination of federal statistics.

Especially in a decentralized system such as ours, conscious coordination must begin at lower levels, or efforts to coordinate the system as a whole become extremely difficult, requiring inordinate effort and staff size in the central unit. Historically, most of the resources devoted to coordination of federal statistics are to be found at the agency level. What is missing, usually, is any organized statistical policy effort at the departmental level and now, of course, there is essentially a void at the White House–executive office level. Congress should by law require each department to establish as a function of the secretary's office the coordination of the department's statistical policy activities. In those departments with a strong statistical agency, this could be staffed and managed by the statistical agency. In an average-size department this might require 10 to 12 positions. With this capacity, each department would also have the skills necessary to collaborate with other departments and the executive office in setting standards, reducing statistical burden, organizing access and user services, and maintaining confidentiality and privacy, as well as coordinating their respective statistical policies. Under these conditions, the personnel required in the executive office statistical policy unit would be modest, perhaps less than the 40 positions in the legislation sent to Congress, but not acted on, in 1979. In short, what is needed is not one large central unit, but a system of small statistical policy coordinating units organized to match the decentralized structure of federal statistics and decision making.

Other nagging problems remain about which we know less. Is statistical policy still unduly vulnerable if established in separate, small units in the departments and the executive office? The internecine bureaucratic and political conflicts that often rage around cabinet officers and in the executive office do not create an environment in which fragile organizations survive long. We know from experience that a legislative mandate is necessary to assure durability in such an environment. Otherwise, activities such as statistical policy, where decisions should be politically neutral, which have low, short-run political visibility and involve long-run technical planning (i.e., are deferrable in the short run), will disappear.

The design of appropriate institutions for statistical policy is inherently one of balancing conflicting goals. These goals include being close to policy decisions yet free of partisan political influence, assuring high quality, yet timely and relevant data, protecting confidentiality, yet providing easy user access, and being responsive to White House and congressional information needs while also serving program and agency goals.

Creating legislatively mandated organizations in the executive office is something one should resist unless it is quite certain that the function is both necessary and of major long-term importance requiring legislation for durability. Otherwise, we are unnecessarily reducing the options and flexibility of future presidents in organizing their staff.

Legislated functions and organizational proximity to the policy process of the executive branch are necessary but not sufficient. One essential organizational element is missing. A single responsible forum in the House and one in the Senate for legislative oversight of the federal statistical *system* and its performance is needed. None with a clear, exclusive mandate exists, and statistical policy and oversight in Congress are as fragmented as the statistical system. These two committees should be responsible for policy and oversight of the statistics needed to support the decisions of Congress, the White House, and the cabinet secretaries. This is necessary in our political system before any area of government-wide policy can have coherence and, therefore, potential effectiveness.

An Information Management Approach

The system just described could be organized in another way. Instead of a structure solely for statistical policy coordination, it could be set up the way the Paperwork Reduction Act envisioned, as an information management system in which statistical policy, clearance, and the burden budget plus policy for administrative records, sharing of records, privacy of records, and the acquisition and management of automatic data processing and telecommunication equipment are managed in the same policy unit at departmental and executive office levels. It is a fatal mistake to have combined information functions with regulatory policy as they are now in OMB.

As has been argued before, there is a substantial potential for destructive competition for resources and policy access among these information functions even without the presence of regulatory policy (Bonnen 1981). In any crisis management atmosphere, statistical policy, policy for administrative records, privacy of records, and perhaps the sharing of records will tend to lose support while control functions such as forms clearance, paperwork burden budgeting, and ADP-telecommunications policy activities will tend to gain. Only a unit governed by strong philosophic commitment to integrated information management would be capable of protecting the long-term planning and coordination functions from activities with greater short-term political significance. This presents a difficult challenge and is unlikely to work. However, the gains from integration of these policy functions *could* be significant. Neither approach is viable without strong congressional concern for and continued oversight of the integrity of *each* of the multiple information functions. This responsibility must be lodged in one specific committee in each house.

Before modifying the Paperwork Reduction Act, Congress should analyze each information function for its compatibility with the others. Only those functions that institutionally or as a matter of public policy require high integrity and some protection from political or policy advocacy should be managed with statistics. A combined information management system formulation raises in a different form the question of whether the central unit of the system should be left in OMB or established as a separate executive office agency. Since there is some need to coordinate ADP-telecommunications policy decisions, as well as clearance, burden budget, and even some statistical policy decisions with the budget process, a case can be made for an OMB location, if all these functions are combined, but even then *only if major institutional safeguards are created by legislation.*

For an Office of Information Policy to function and survive in OMB, its director would have to hold a presidential appointment confirmed by the Senate (an arrangement OMB understandably dislikes). In the establishing legislation the director should be designated director of the office as well as the chief statistician of the U.S., and should be required to report both to the president and to the Congress. In addition, the legislation should establish an Executive Office Council on Information Policy (composed of representatives of each cabinet secretary, the Federal Reserve Board, and executive office agencies as designated by the president). The council should be chaired by the director of the Office of Information Policy. The law should also create two external advisory committees to the Office of Information Policy, one composed of nonfederal users and the other of technical experts. The legislation should establish a common confidentiality statute to cover major statistical agencies with administration of the statute vested in the chief statistician. The personnel and budget functions of the Office of Information Policy should be the sole responsibility of the director of the office. If these institutional safeguards cannot be provided by legislation, the Office of Information Policy should be located outside OMB as a separate agency in the executive office of the president. The institutional integrity of the office must be protected within OMB, or the crisis management environment of budget and regulatory policy will erode and ultimately destroy this information policy and coordination unit.

Even with proper congressional and executive branch organization and a legislative mandate, the office may still lack an effective presence. Only when statistical policy or information policy maintains a clear relevance to the decision agenda of current political leadership, in both Congress and the executive branch, will that policy be assured some degree of influence and effectiveness.

This is the gap that statistical leadership has always had to bridge. Policy makers must be persuaded to include statistical agency leadership in appropriate policy councils so that statistical planning can anticipate decision needs. Failure to do so all too often leaves statistical agencies to learn about new policy initiatives from the newspapers. It is amazing to me that even without appropriate access or institutional arrangements, statistical policy leadership and staff have often successfully bridged this gap in the past.

We are failing to provide the coordination necessary to make a very decentralized statistical system function effectively and efficiently. At some point when the costs of cumulative failures in coordination result in sufficient political distress, an exasperated White House or Congress is likely to centralize the statistical system itself. This would be preferable to a future of continuous failure to achieve adequate central coordination of decentralized statistical activity. While the question of decentralized versus centralized organization of statistics is beyond the scope of this article, it should be clear that these are the only choices (see Duncan and Clemence 1981, and Bonnen et al. 1981, ch. 2, for an assessment of this issue). Failure to make one approach effective is likely to lead eventually to the imposition of the other.

Epilogue

Over a year has passed since the above assessment of statistical coordination was rendered at the 1982 annual meeting of the American Statistical Association. Subsequent events have not modified in any substantive way the conclusions drawn. The capacity for coordination of statistical policy remains minuscule and the commitment of the government to statistical coordination has vanished into grudging reactions to critics.

A broad and intense public expression of concern for the impact of reorganization and budget cuts on the nation's data base has occurred. Federal statistics experienced a 20 percent decline in real resources over the fiscal years of 1981–1983 with reductions in sample size, detail, and frequency of collection, as well as the elimination of many specific surveys and reports. Across-the-board reductions in dollar resources and in paperwork burden have caused random destruction. This was permitted and compounded by the failure of OMB to establish and act on national statistical priorities during the budget process in these years. In addition, deregulation has eliminated the sources of many statistics widely used in and out of government. User fees have been and are being imposed. Federal policy, as proclaimed by OMB, now limits federal responsibility for the provision of statistics solely to the support of federal decision makers, thus excluding other public and all private users.

In January 1982 Representative Robert Garcia, chairman of the House Post Office and Civil Service Committee's Subcommittee on Census and Population, asked the Council of Professional Associations on Federal Statistics to organize a hearing on the impact of budget reductions on the utility and quality of federal statistics. At the hearings held in March 1982, over 100 representatives of business, labor, public and private research organizations, the United States Commission on Civil Rights, education, and state and local government submitted testimony about the impacts and urged remedial action by Congress. Representative Garcia said of the hearing: "This is probably the largest response that this subcommittee has ever had, including the days just prior to the taking of the 1980 Census" (U.S. Congress. House. Committee on Post Office and Civil Service, Subcommittee on Census and Population 1982, 1).

Katherine Wallman (1982), director of the Council of Professional Associations, has described the evidence of these hearings in some detail:

> Already obvious to many users of statistics are the delays in processing of available data and the reductions in publication and dissemination services of many statistical agencies [e.g., delays in processing 1980 Census data]. A second major effect of the reduced

> resources for federal statistical programs is the elimination of some long-standing programs [in almost all major statistical agencies] and the loss of geographic detail [particularly for states and metropolitan areas] in other series [e.g., reduction in sample size for the Current Population Survey (CPS) and the Annual Housing Survey, to name but two]. Likewise, the periodicity of many federal surveys and reports will be reduced, leading to greater erosion in the timeliness of federal statistics [e.g., National Nursing Home Survey and several other National Center for Health Statistics surveys]. Perhaps less obvious, but equally as serious, are threats to the quality and reliability of federal statistics which will occur as a consequence of smaller sample sizes, delays in sample redesign, and reductions in quality control activities [in almost all agencies]. Most serious of all, from the perspective of many producers and users of federal statistics, are those effects of the budget reductions which Janet Norwood, Commissioner of Labor Statistics, has characterized as "mortgaging the future"—the elimination of statistical and survey research, the delay of methodological improvements to ongoing programs, and the loss of highly qualified staff, particularly at the junior and mid-professional levels [again in almost all agencies]. (Parenthetical examples drawn from the hearings have been added.)

Subsequently, on June 3, 1982, Representative Jack Brooks, chairman of the House Committee on Government Operations, held hearings on "Federal Government Statistics and Statistical Policy" to examine the effect of budget cuts and the dismantling of the statistical policy office on the government's ability to provide the statistical data used in public and private sectors. Testifying were Christopher DeMuth, director of OMB's Office of Information and Regulatory Affairs; Steven Feinberg of Carnegie-Mellon University, and chairman of the Committee on National Statistics of the National Academy of Sciences; Peter Francese, publisher of *American Demographics* magazine; Courtenay Slater, president of CEC Associates and former chief economist of the Department of Commerce; and Joan Wills, representing Governor Richard Snelling of Vermont, chairman of the National Governors' Conference. In the appendix to these hearings are Congressional Research Service reports on the current situation in federal statistics. This includes the 1981–1983 statistical budget changes for individual agencies and a detailed overview of what has been happening to the nation's statistics. This review covers health statistics (U.S. Congress. House. Committee on Government Operations, Subcommittee on Legislation and National Security 1982, 290–315) plus those for the departments of Energy, Labor, Justice, Agriculture, and Education. Also reviewed are income statistics, Census Bureau programs, and statistical coordination.

Then in July 1982 the Joint Economic Committee of Congress transmitted to House and Senate appropriation committees a report based on a study done for it by Courtenay Slater (1982). The committee report, *Statistics for Economic Analysis: 1983 Budget Requirements*, recommended $18 million in restorations and additions to the president's fiscal 1983 budget. Programs included were:

The Survey of Income and Program Participation (SIPP), a new program linking welfare program participation to income;

Population Characteristics, to improve measures of state, local, and regional characteristics;

GNP Data Quality Maintenance, national economic accounts, business, government and foreign trade, international price data, farm employment and income estimates;

Redesign of Household Surveys, to rebase the housing, health, crime, CPS, and consumer expenditure surveys on the 1980 Census;

Support for the Committee on National Statistics of the National Academy of Sciences;

Employment and Wage Data (Bureau of Labor Statistics).

These national statistical programs had been eliminated from the president's budget by the cabinet agencies or by OMB. The Joint Economic Committee recommendations were to a substantial degree accepted by the appropriation committees though the programs were funded at levels well below those recommended. For example, the SIPP program and the redesign of the household surveys were refunded but below their planned levels. The failure of the president's budget to fund these two programs is an especially egregious example of the failure to establish national statistical priorities when making budget decisions. Hundreds of millions of dollars of federal expenditures and major policy decisions depend on the accuracy of the large major household surveys whose sample frame, the 1970 census, is now over 10 years old. Millions of dollars had already been invested in developing the SIPP program, which was intended to provide an improved factual basis for controlling welfare expenditures and understanding the income dynamics involved in program interactions at the recipient level.

The Paperwork Reduction Act of 1980, in which primary authority for central statistical coordination is now located, expires in 1983 and must be renewed. On April 27, 1983, Representative Jack Brooks, chairman of the House Government Operations Committee, held an oversight hearing for this purpose. Testifying were Representative John Dingell; Comptroller General Charles A. Bowsher; OMB Deputy Director Joseph Wright; and David Marsh, executive director of the Business Advisory Council on Federal Reports. Then, on May 6, 1983, Senator John C. Danforth, chairman of the Senate Committee on Governmental Affairs Committee's Subcommittee on Information Management and Regulatory Affairs, held hearings for the same purpose. Except for Representative Dingell, the same people testified, plus Professor Steven E. Feinberg of Carnegie-Mellon University who is currently chairman of the Committee on National Statistics of the National Academy of Sciences.

At these hearings the comptroller general communicated a U.S. Government Accounting Office (GAO) (1983) report, *Implementing the Paperwork Reduction Act: Some Progress but Many Problems Remain*. This report describes OMB's statistical policy coordination as an area of declining resources and little action. They report that since the Paperwork Act was passed in 1980:

- long-range planning activities have not been completed;
- statistical policy directives have not been reissued;
- no evaluations of statistical programs have been performed; and
- resources applied to OMB's statistical policy coordination and oversight responsibilities have diminished sharply.

The report notes that the Statistical Policy Branch has been abolished and a portion of its resources dispersed to "desk officer" duties elsewhere in OIRA. They conclude that "OIRA's desk officers are responsible for overseeing a multiplicity of day-to-day information resources management and regulatory actions. The desk officers' responsibilities are simply not compatible with the longer range work involved in statistical coordination and oversight" (U.S. Government Accounting Office 1983).

The unusual current awareness of what is happening in federal statistics is a consequence of organized professional association activity, media coverage, and the several congressional hearings and reports described above. In addition, dozens of individual congressmen have expressed their concerns to the director of OMB. Throughout, OMB has continued to respond in a minimal or damage control mode.

The default in stewardship of statistical policy and its coordination is nearly total. Consider what OMB is currently not doing. Its failure to establish and enforce coherent national statistical priorities during the real resource budget reductions of the last two fiscal years left oversight and coordination of national statistical priorities to Congress. This culminated in a Joint Economic Committee (JEC) study conducted by Courtenay Slater. Most of the JEC's recommendations were accepted by the appropriations committees. OMB would point out that it had begun to act on some of the most egregious of its defaults by this time. Its leadership acted, however, only because of the growing criticism inside the executive branch, in the media, and in Congress. If OMB were really doing its statistical policy job, most of these statistical priority problems would have been discovered before the president's budget went to Congress, not afterwards.

No attention is devoted now to one of the most important functions of statistical policy, the development of long-range plans for improving the performance of federal statistical activities and programs. Unless reversed soon, this assures an eventual decline in the quality and relevance of federal statistics.

There is as well no systematic attention being given to evaluation of statistical program performance or to assuring agency compliance with government-wide statistical policies, standards, and guidelines. The coherence of federal statistics as well as their quality and relevance are in jeopardy.

Very little attention is devoted to coordination of the collection, analysis, and dissemination of statistical information. Only limited attention (relative to the challenges) is now given to the development and implementation of statistical standards, principles, guidelines, and policies.

These are all major functions of statistical policy and are responsibilities of OMB specified in the Paperwork Reduction Act of 1980.

As for their function of anticipating the data needs of policy makers, OMB statisticians are limited today to reading about general policy initiatives in the newspaper. While this is not an area in which the central statistical policy unit has always distinguished itself, we are in even worse shape than when the function was exiled to the Commerce

Department during the Carter administration. Then, a cabinet level Statistical Policy Coordinating Committee existed. Today, this kind of general policy linkage not only does not exist, but statistical policy has been limited in its public policy linkage to regulatory policy. The resources of OIRA are devoted primarily to burden control and regulatory policy. Other functions are managed to serve these two primary control functions. Whether inadvertent or conscious, statistical policy has become the indentured servant of regulatory policy.

Given the very small number of personnel devoted to statistical policy and the limited level of understanding of and commitment to statistical policy by OMB political appointees, little improvement seems possible unless major changes are made by Congress.

No long-run policy planning or government-wide coordination function can successfully compete for OMB resources with control functions such as regulatory policy or the paperwork burden budget. In the long run, statistical policy must be removed from OMB. But short of moving statistical policy out of OMB, there are several things that might improve the present intolerable situation. The following suggestions arise out of the limitations of the Paperwork Reduction Act or its administration. The first and most important is separation of the regulatory policy functions and Paperwork Reduction Act functions into two different OMB units with separate lines of authority for reporting to the director. The statistical and information functions will always be neglected and mismanaged in the present structure. The basic integrity of these functions is in continual jeopardy as long as they are submerged in a regulatory unit. A major impairment or even a perceived impairment of public belief in the objectivity and accuracy of government numbers could easily destroy much of the value of federal statistics. It would take years to reestablish public confidence. The present OMB organization for statistical policy is an accident waiting to happen.

Another improvement in the functioning of statistical and information policy might be achieved if legislation required an annual report to Congress for each function of the Paperwork Reduction Act (including expenditures) and if the total appropriation for Paperwork Reduction Act functions were identified as a line item in the OMB budget. Otherwise, in OMB's life of continuous crises, resources will continue to be drained off to other activities.

Staffing should be increased by congressional mandate to levels capable of executing the functions of the act and be maintained through congressional oversight. This would require a larger number of personnel than at present. It is worth noting that all of the information functions, especially statistical policy, require high-quality professionals.

Finally, the experience to date with the paperwork burden budget suggests some modifications are needed in its form and management. It is administered as if every area of data collection had the same burden characteristics, respondents, and problems. This is not true, and the effect has been to distort priorities and impose unjustified reductions on some areas while others escape with a lighter burden relative to the problems created, the benefits to respondents, or the value of the collection. In short, it is a bludgeon, a blunt instrument that needs considerable refinement to be effective rather than destructive, now that the initial goal of the Paperwork Reduction Act (a 25 percent reduction in respondent burden) has been achieved and even exceeded (29 percent is claimed). The draft renewal of the Paperwork Reduction Act now in Congress would set new burden reduction goals of 10 percent for fiscal 1984 and 5 percent more in fiscal 1985.

Paperwork burden budget goals should be set separately for different types of respondent burden. Distinctions in burden budget decision criteria should be made between such differing sources of burden as tax records, regulatory records, action agency administrative records, statistical data collection, grant program records, and research data collections. There may well be other categories. Statistical data, for example, are collected under conditions that should create far less burden and assure greater accuracy and value than typical administrative records, where unnecessary 100 percent samples, inadequate frame design, duplicate collections, confused purpose, and other difficulties are common because of poor design skills. The problems of a respondent to a regulatory collection should be viewed differently than the problems of a respondent to a grant record, and both should be viewed differently from those of the respondent to a statistical survey.

Having squeezed the "water" out of the paperwork burden budget, future reductions should be achieved with greater recognition of the heterogeneity of the universe addressed, or inequities will grow. The difficult part of burden budget management lies ahead. To be successful, burden budget management must increasingly apply sophisticated statistical skills to define the concept of burden, to identify the unnecessary burden caused by inadequate design of data collection, and to help the agencies find proper solutions.

Despite all this, in his testimony before Representative Brooks's Committee on Government Operations on OMB's statistical policy performance, the director of OMB's Office of Information and Regulatory Affairs appears to believe everything is going swimmingly. But one should also read Mr. Brooks's response, which follows:

> Mr. DeMuth, you have given a very beautiful statement. It sounds wonderful. I don't believe that that dog will hunt, though. As soon as they take the shotgun out that dog is going to hide in the cage and never come out and hunt birds. . . .
>
> You know, all those beautiful things sound good, but you haven't convinced any of the people in either the business, the academic, or statistician groups of the viability of this program.
>
> When you . . . don't fill the position of Chief Statistician and then abolish the Statistical Policy Branch by taking four people and sticking them in your Office somewhere and assigning them to agency work, they will have about as much chance of influencing the policy of those agencies as a cur dog would have of winning a contest.
>
> Now let's be realistic. . . . If I am running one of those agencies and they send some third-ranking statistician who got his degree in accounting somewhere to tell me how to run things, I will listen to him and give him the treatment and do like I cotton well please and all of my agency will back me up. I will also have the industry that likes the way I do things backing me up, and you are really not going to have any influence unless you have some kind of a head of that agency who really is technically competent to point out what I am doing wrong (U.S. Congress. House. Committee on Government Operations, Subcommittee on Legislation and National Security 1982).

These hearings were held in June 1982. In September Mr. Brooks's committee report found that:

1. Despite the increasing reliance of all sectors of society on statistical data, the past decade has witnessed an alarming decrease in the resources devoted to overseeing federal statistical activities;

2. The absence of a professionally qualified individual heading an adequately staffed unit focusing exclusively on statistical matters requires

that increased scrutiny be given by Congress to OMB's development and implementation of federal statistical policy and to ensuring the continued integrity of the federal statistical system;

3. OIRA's merger of the statistical policy function with the other regulatory and information management responsibilities raises serious questions as to the ability of OIRA to discharge its statistical policy obligations under the Paperwork Reduction Act of 1980.

The committee then made five recommendations to OMB Director David Stockman for amelioration of the situation in statistical policy and coordination (U.S. Congress. House. Committee on Government Operations 1982):

1. Ensure that OIRA is staffed with an adequate number of qualified individuals to properly discharge the office's responsibilities concerning statistical matters as mandated by the Paperwork Reduction Act of 1980;
2. Ensure that an individual who is professionally qualified to supervise statistical policy matters be hired to advise the administrator of OIRA and the director of OMB on how best to carry out their statistical functions set forth in the Paperwork Reduction Act of 1980;
3. Reconsider the decision that resulted in the elimination of the Statistical Policy Branch as a distinct entity within OIRA;
4. Reconsider the decision that resulted in the discontinuance of the publication *Statistical Reporter;*
5. Reconsider the decision not to collect Exhibits 54 from agencies (on statistical product plans and budget).

In response, DeMuth has decided to give "greater prominence" to his "core group of statisticians" (now 4.5 full-time positions) by reestablishing a chief statistician position. However, without a credible independent unit or a critical mass of high-quality professionals to lead, as Representative Brooks pointed out in his hearing, this is just a staff position without real authority. The administration has not asked for any changes to be made in renewing the Paperwork Reduction Act. The changes introduced by the House, in the bill reported out by the Government Operations Committee (H.R. 2718), require appointment of a chief statistician and some additional reporting to Congress on the information functions, but do not make any fundamental changes in the current organization and status of statistical policy and coordination in OMB. The Senate is expected to adopt the House provisions.

The only reason there has been any OMB response is that cries of outrage from the statistical profession and from a wide range of statistics users in business, research, education, and in state and local government have led to strong congressional expressions of distress. The credibility of current OMB leadership with statistics users and the professional statistics community is imperiled by their actions of the past two years. Only a reestablished unit and a return to a statistical policy staff of 15 or so professional personnel will persuade many that OMB is responding in anything more than a de minimis mode for the purpose of dampening the criticism. Nothing yet suggests that OMB as an institution has changed its mind and really supports statistical policy and coordination.

United States government statistics have led the development of official statistics all around the world. Our system is envied for its integrity, its intellectual accomplishments, and the quality of its statistical performance. We stand on the shoulders of giants. Their legacy is now slowly being destroyed. This cannot be tolerated quietly. It is a disgrace which must be remedied.

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Acknowledgments: This is a revised version of an article originally published in the *American Statistician* 37(3):179–92 (August 1983). It is republished by permission of the American Statistical Association. The author is indebted to a large number of reviewers for many useful criticisms, but is solely responsible for its content and any errors. This is Michigan Agricultural Experiment Station journal article number 10711, project 991.

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Comment: The Democracy of Facts

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> Knowledge will forever govern ignorance: And a people who mean to be their own Governors, must arm themselves with the power which knowledge gives (James Madison).

AT THE HEART OF REPRESENTATIVE DEMOCRACY IS the freedom of the citizen to choose. How that freedom is exercised depends, of course, on many factors—religious, cultural, philosophical, and personal—that can never be counted or weighed or reduced to any form of objective measure. But choice can also turn on considerations of more or less, cost or benefit, advantage or disadvantage. And wherever the society's ultimate choices emerge from public debate, their wisdom is bound to reflect the quality of the information that informed the debate.

The point is illustrated twice over by the current debate on the adequacies and inadequacies of our educational institutions. On one level, the debate attests to a lively public awareness that the skills needed for developing and synthesizing knowledge are essential to the

Milbank Memorial Fund Quarterly/*Health and Society*, Vol. 62, No. 1, 1984
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preservation and advancement of a free and prosperous society. On another, it points up the fact that the debate itself sprang from statistical surveys indicative of the extent to which those same institutions have failed our young people. It is significant, however, that the debate is not about the data on reading levels, test scores, and other measures of educational attainment. All parties to the debate have accepted the validity of the data. The argument is, as it should be, about how to improve our educational system.

When America was small and agrarian, the family was largely self-sufficient, and individual decisions predominated. When we became an industrial society, the sphere of activity that had to be brought within the range of community action grew larger, and now that we are being transformed into a technological society, that sphere is larger still. As complexity has grown, so has the range of the thousands of decisions that have to be made in order to protect the national security, promote economic growth, and preserve social stability. For representative democracy to continue to succeed in the remainder of this century and in the next one, an informed citizenry must arm itself with the power which only the *increase* of knowledge can give.

In the United States, the past fifty years have seen a remarkable flowering of national data sources. The facts, figures, and sophisticated analysis made possible thereby reduce uncertainty, eliminate conjecture, and make it less likely that a given policy will have harmful side effects. But for the contribution of these informational resources in narrowing the range of debate, the political process would long since have been overwhelmed. Many political decisions that would once have generated controversy are now so much simplified by the availability of generally accepted data that they no longer require wide debate. At the extreme ends of the political spectrum factual data will never change dogma, but for the vast majority of decisions access to the facts reduces the necessity for reliance on guesses, hunches, and preconceptions.

As Dr. Bonnen explains in the preceding article, we are now the fortunate beneficiaries of a great variety of high quality, national statistical systems widely used as the basis for decision making by the federal government and state and local governments as well as by industry, labor, and a vast number of interest groups. The census, for example, and the intervening population surveys are drawn upon by a host of program-planning activities at every level. They guide the decisions of education and health care institutions. They are indispensable to the market research conducted by industry. They tell us what is happening to us as a nation and a people.

Our national compilations of vital statistics provide information on fertility rates, population growth and mortality, and changes in family composition. Mortality data and the death index are invaluable tools for the discovery of emerging health problems, leading in turn to important opportunities for biomedical research. Our debt to the Center for Disease Control for the surveillance systems that have helped to conquer measles, Legionnaire's disease, toxic shock syndrome—and now, it is to be hoped, AIDS—is beyond calculation.

The Consumer Price Index, as we all know (and some of us regret), is an integral part of union-management wage negotiations, public and private pension adjustments, tax reductions, and Social Security benefit increases. There was a time not long ago when the only way in which Social Security benefits could catch up with the cost of living was on the political auction block. Shelved in off-years and turned into a Christmas tree in election years, amendments to the Social Security Act bore only incidental relevance to changes in costs or poverty levels. They were arrived at, moreover, with little debate as to their effects on national economic trends.

Lacking high quality statistical systems, we could not plan for the future. We would not know when or how far to intervene in national, state, municipal, or industrial problems. Without reliable data, how would we become aware of the decline of smokestack industries, the loss of topsoil, the depletion of energy resources, or the increase in single-parent families? How could we gauge the success of efforts to cope with crime, housing shortages, hunger, environmental pollution, or military readiness? We often argue about what to do, but we rarely question the basic facts generated by our statistical systems. The reason, quite simply, is that we have learned to trust their integrity. We have come to expect not only that we will always have access to good information, but that, as time passes, its comprehensiveness and quality will continue to improve. Indeed, the availability and quality of government statistics are taken so much for granted that the users have dangerously relaxed the vigor of their insistence upon maintaining and strengthening our data-gathering agencies.

Statistical systems are not sexy, nor do they capture the special concern of any segment of interest groups. They do not tug at the heart as does the plight of a child in need of a liver transplant; unlike illiteracy among high school graduates, the discovery of their deficiencies does not sound a clarion call to action. Yet it is the statistics that tell us when liver transplants have become viable and that our teenagers cannot read.

As Dr. Bonnen makes irrefutably clear, our statistical capability is nearing a "disaster or a disgrace." He warns that there is no longer a focus of statistical policy and coordination at the national level. I would add to his concern an equal concern about diminishing support for certain national statistical systems, about the inadequate size of the samples, and about retrogression in the availability of regional, state, and local data. Scarcely less shortsighted has been the neglect of the social and economic research that is intrinsic to our ability to use the data, to weigh and balance alternatives, to conduct cost-benefit analyses, to evaluate programs, and, thus, to improve the chances that our choices will be wise.

In discussing the coordination of statistical policies, Dr. Bonnen also addresses three fundamental prerequisites for the use of data in decision making:

- The quality and integrity of the data;
- The competence of the people who provide and analyze the data; and
- The objectivity and independence of the data.

From the perspective of the first of these prerequisites, it is apparent that the coordination of statistical policy and administration is vital to statistical quality and integrity. Coordination assures consistency in definitions; it enhances the validity of sampling frames and samples; it encourages the monitoring of methodology; it prevents duplication and overlap in data collection and promotes the sharing of data, thereby conserving resources. Coordination identifies the gaps in knowledge that no one agency alone can identify and makes possible the setting of priorities for filling these gaps. Such priorities are no less necessary in the collection of data than in the effort to meet other national needs, for resources are always constrained. A strong coordinating mechanism can assure that the claims of different users are fairly assessed and that the data essential to rational policy decisions are timely, of high quality, and available to all users. Coordination is also necessary to overcome the inconsistencies among statistical systems that impair our ability to project long-term demographic, environmental, and economic trends.

In the case of the second prerequisite, coordination raises the overall level of competence of the people who provide knowledge-related services by reducing the fragmentation of data collection and hence the dilution of talent. Coordination gives talent a wider impact by requiring high and uniform standards for the design of data systems and the interpretation of the facts they generate. Lacking such coordination, statisticians are as prone as other bureaucrats, public or private, to build empires and battle over turf. Fragmentation, moreover, fosters the propensity of program agencies to let data collection be influenced by self-serving motives.

In every field, the best professionals are attracted to working environments that demand high standards. In the last few years the federal statistical enterprise has experienced the disturbing loss of a large number of nationally regarded statisticians and analysts—some because of cuts in data collection and statistical coordination activities, others because they perceive a deterioration in their working environment brought about by a decline in regard for the value of objective data. The development and maintenance of large statistical systems is an arduous endeavor. It requires steadfast interest, a large store of patience, and sustained support. Unless the current trend can be checked by attracting new, qualified people to federal statistical programs, the long-term consequence will be a depressing impact on the availability of necessary knowledge.

Every administration finds itself under pressure from the proponents of individual programs who wish to collect their own data in order to evaluate their own accomplishments, uncover developing needs, and use these findings to justify the program's continuation or expansion. This is where the third prerequisite—the objectivity and independence of the data—comes in. Objective and independent national data bases create barriers to the proliferation of data collection and protect the public from duplicative questionnaires and reporting requirements. They also provide insurance against the tendency to manipulate data in a way that promotes a specific categorical need or program.

This nation's data sources have gained credibility over the decades because the data gathering and coordination agencies have been independent and nonpartisan. It is reassuring that Dr. Bonnen has not found evidence of any change in this tradition of independence. We should be concerned, nevertheless, lest the slippage in the quality of personnel and in the coordination process that oversees the use of data may ultimately lead to the politicization of the systems themselves.

As the preceding article shows, the threats to the development and coordination of federal statistics are not new. The erosion has been going on for a long time. We have now reached the point, however, where the sea threatens to engulf the beach. The Congress is no less culpable than the executive for having allowed this threat to develop. The users of data in the states and the private sector, meanwhile, have not, thus far, raised their voices. If their silence is interpreted as acquiescence in the sabotage of federal data systems, they will deserve their own share of blame for the loss of an irreplaceable resource.

As de Tocqueville noted almost 200 years ago, we are a nation of interest groups; we are joiners and activists. It is time that we joined together and became active on behalf of a strong, independent agency with the capacity to coordinate our national data-gathering resources. It is time that government, business, and labor united in protecting the independence and promoting the excellence of these resources. We, the people, have greater need for them than ever before. Our freedom of choice—which is to say our freedom itself—has never so much depended on them.

Acknowledgments: The author is greatly indebted to his former colleague Ruth S. Hanft for her invaluable assistance in the preparation of this essay.

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Comment: Federal Statistical Coordination

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PROFESSOR JAMES T. BONNEN AND SEVERAL COMMENTATORS (Feinberg 1983; Slater 1983; DeMuth 1983) on an earlier version of his work raise and commingle, as I see it, a number of separable themes that it may be helpful to disaggregate for purposes of discussion. Their views well reflect the typical Washington stew, in the sense of a heterogeneous mixture of complaints and aspirations concerning structure of government, funding and allocations, personnel, and substantive policies.

Major Themes and Messages

1. The declared central concern is the reestablishment of federal statistical coordination, which is stated at the outset to be dead. It is unlikely that federal statistical coordination, as Professor Bonnen recognizes, ever lived, although the specification of an attainable higher standard of performance for federal statistics is welcome. (I return to the central issue of the meaning of practical coordination in a later section of this commentary.)

2. The reduction in the funds appropriated for federal statistics is

Milbank Memorial Fund Quarterly/*Health and Society*, Vol. 62, No. 1, 1984
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a recurrent refrain, a cut estimated to be 20 percent in real resources in the fiscal years 1981–1983. But strong complaints are legion against budget and appropriation down-sizing of programs regarded as worthwhile or effective. I have, like others, my own list of complaints over statistical series that have been eliminated or changed so as to affect comparability or the quality and reliability of their use in my own work. The elimination of work-stoppage series for government employees and the counting of stoppages involving only a thousand or more employees in the private sector, for me, are irritating illustrations. But the means of restitution of funding do not lie in the arguments of professional statisticians but are more likely crassly related to mobilizing users of the data.

3. The concern at times is with the failure to achieve a recommended organization "to do a good job of central coordination of statistical policy" of 200 or 40 or even 15 positions as a separate office in the executive office of the president. The aspiration is also for an office in each cabinet department, of 10 to 12 positions, to coordinate the statistical policy activities of the department.

4. The elimination of the position of the chief statistician, and the appointment of someone less than a distinguished statistician on June 20, 1983, is responded to as a denigration of the profession; the pride and status of statisticians is at stake. Similarly, the abolition of the statistical policy branch in the Office of Information and Regulatory Affairs in the Office of Management and Budget (OMB) is seen as symptomatic of a downgrading of the central statistical function and is regarded as a reduction in the capacity to influence statistical activities of federal agencies. Indeed, dealing with vital issues of statistical policy under the Paperwork Reduction Act of 1980 is inherently demeaning.

5. The paper was originally proposed to "heighten the awareness of our colleagues, of Congress, and of the general public on the importance of this issue" (Wallman 1983). At times Professor Bonnen's paper also gives the impression of a political polemic. In the Washington scene, and by its mores, the author has entered the political lists, an arena for jousting at the onset of the political season.

So the arguments are concerned with money, organizational aspirations, professional status, political polemics, and the objective of federal statistical coordination, all from the perspective of statisticians, largely from the academic side of the profession.

Organizational Structure Issues

Some countries have highly centralized departments of statistics and others, like the United States, are decentralized among many federal agencies and among local, state, and federal levels of government as well as sharing responsibilities for some aggregations and series with private-sector organizations. In our country, federal statistical coordination, whatever that may mean and by what various means it may be achieved, is accordingly a requisite objective.

I would have thought that such a general objective at the outset would be widely accepted and that details of structure and program could be generally mediated among users, congressional committees, federal statistical agencies, both large and small, and the executive office by the administration and professional statisticians. But structure and content of coordination cannot be successfully and operationally decreed or even legislated by anyone, particularly statisticians. Like all Washington problems, this area has large political components, in several senses of the term, and must be fundamentally approached as such, recognizing that there are technical components.

A few comments on the structure proposals may help to convey the fundaments of the preceding paragraph:

- I would not be comfortable with the proposal for a staff in the secretary's office (suggested to be 10 to 12) to coordinate the department's statistical policy activities, particularly in departments with major statistical units such as the Department of Labor's Bureau of Labor Statistics (BLS). That would initiate pitched battles with existing units; it would in part duplicate functions now performed in program budgeting or through special task forces, and it would create endless opportunities for games with OMB and congressional committees.
- The proposal to remove an office of federal statistical coordination from the main line of OMB genuinely surprises me, although separation from an office of regulatory policy, the Office of Information and Regulatory Affairs in OMB, appears sensible in view of divergent purposes and the need for such different personnel. But new legislation would be required. Statistical standards or coordination cannot be achieved in Washington without the direct backing of budget examiners who can influence in detail the flow

of funds for one purpose or another and reduce duplication. The decisions and details need to be influenced at the examiner level; they are too specialized to be shaped at higher levels. The fiat of a chief statistician is not likely to accomplish much as against the interests of separate agencies, users, and congressional requests. A close relation between a statistical coordination office and budget examiners assigned to agencies is essential for serious coordination.

- Professor Bonnen is correct in perceiving that executive performance in an area and special, focused congressional oversight should be closely linked. That is easier said than done. The political muscle to achieve these results is rather with the users of data, with whom some compromises will need to be made about structure and coordination.

Federal Statistical Coordination

The issues of federal statistical coordination are genuinely important and they are likely to be even more important in the future as the volume of data in private and public organizations grows, and questions of quality become more insistent. But statistical coordination is not necessarily central coordination and certainly is not direction. (We have the same sort of a problem in the discussion of industrial policy today.) Major statistical agencies have always engaged in direct negotiations and will continue to do so, e.g., the Bureau of the Census and the Bureau of Labor Statistics. Extended discussions take place between users and agencies over issues affecting quality. Congressional concerns from constituents, interest groups, and local and state governments also have a direct impact on the process. Thus, statistical coordination must be much more broadly viewed than as a technical matter or an issue of simple location of function in the federal executive.

There is, however, a range of vital and professional issues affecting the quality of statistical information and the purposes for which they may be used that need urgent attention. Many of these problems affect my own work and that of colleagues as academicians or practitioners. In view of the backlog of questions, some of the most urgent priorities would need to be established. From his wide knowledge, Professor Bonnen could advance the cause of quality statistics by indicating the priorities he would establish, other than the eleven items he uses to define "central coordination of statistical policy." My own untutored priorities would include: limits on data that affect confidentiality; a review of the concepts of occupations and industries; publication standards; and the division between state and federal data in a number of series, in addition to some research into applicable statistical methods and data handling.

I would readily support a modest unit of professionals with distinguished leadership within OMB to perform such functions provided that it is well understood that results cannot be achieved by fiat, and that the opportunities for constructive coordination depend upon working together and working out the numerous compromises necessary to create results. Any other approach will not work in this world.

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The American Statistician

A Publication of the American Statistical Association

VOLUME 35 · NUMBER 4 NOVEMBER 1981

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A Report and Comments on Improving the Federal Statistical System

Overview

HARRY M. ROSENBERG*

The President's Reorganization Project for the Federal Statistical System in 1979 recommended establishment of an Office of Statistical Policy in the Executive Office of the President, functioning as a separate agency reporting to the president and accountable to the Congress. That office would be the focus of federal statistical coordination and policy. The Final Report of the project, which follows, describes the rationale and historic background for the project's recommendations and the mission and functions of the proposed office. Comments on the report are provided, as is a description of subsequent legislation that has resulted in statistical reorganization that differs from that recommended by the project and approved by the president.

KEY WORDS: Statistical policy; Statistical reorganization; Statistical coordination; Federal statistics; Reorganization.

The President's Reorganization Project for the Federal Statistical System, under the direction of James T. Bonnen of Michigan State University, issued a report in 1979 entitled "Improving the Federal Statistical System." That report, reproduced in this issue of *The American Statistician*, was the basis for a presidential decision in January 1980, which called for an office of statistical policy and coordination in the Executive Office of the President. That decision was not implemented. As is said in the comments that follow the report reprinted here, a different form of statistical reorganization has resulted from recent legislation, whose central features for statistical organization at the federal level are described and discussed.

Because it is felt that the issues that gave rise to the Bonnen project's work are highly relevant today, and because it is felt that solutions proposed by the Bonnen project—and widely recommended in the statistical community—are important solutions to problems of statistical policy and organization, the editors of *The American Statistician* reprint the Final Report of the project. In addition, three statisticians with distinguished experience in federal agencies comment on the report in light of changes—administrative, legislative, and political—that have occurred since the report was prepared. Dr. Bonnen, Project Director for the President's Reorganization Project for the Federal Statistical System, also provides a retrospective assessment of the report and of subsequent developments as they bear on federal statistical organization. As a conclusion, Dr. Joseph Duncan, the Assistant Administrator for Statistical Policy of the new Office of Information and Regulatory Affairs in the Office of Management and Budget, describes the status and functions of his office, which was created by the Reagan Administration as part of the implementation of the Paperwork Reduction Act of 1980.

[*Received and revised June 1981.*]

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Improving the Federal Statistical System: Report of the President's Reorganization Project for the Federal Statistical System*

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1. THE PROBLEMS

Unlike most other countries, the United States has a decentralized statistical system. For most of its history this system has worked well. Starting with the constitutionally mandated decennial census as a core activity, United States statistical agencies have, over the years, developed exemplary statistical programs to serve the needs of policy makers and other users in agriculture, industry, domestic and foreign trade, labor, health, education, and other areas. United States statistical agencies have pioneered in developing new technologies, such as sampling and digital computers, that have greatly expanded the ability of all nations to collect, process, and disseminate useful statistics.

In recent years, however, especially during the last two decades, this decentralized statistical system has lost some of its effectiveness. Major new demands have been placed upon it and there have been significant changes in the environment in which it operates. The role of government in society and the economy has greatly expanded. Billions of dollars are allocated to state and local governments every year under legislated formulas that depend on federal statistical series. The total amount allocated by formulas has been estimated at around $60 billion in fiscal 1979, $29 billion of which were allocated using just six federal statistical series. Even larger federal expenditures and a major part of private sector wages are affected by federal statistics on prices. There has been a large increase in the number of government agencies and programs requiring statistical data to support policy decisions and the evaluation of their activities.

There are now more than 100 federal agencies with statistical programs. Most of the general or multipurpose data provided by the federal government come from 38 agencies that are either entirely statistical or have major programs to collect or analyze statistics. The total budget of these 38 units has grown about tenfold in real terms over the last 30 years, to $945 million in 1979, and the number employed has grown fivefold, to 30,000, in the same period.

The need for government-wide planning and coordination of statistical programs has long been recognized. The unit created to perform this function was located in the Office of Management and Budget (originally the Bureau of the Budget) from 1939 to 1977, following a five-year history as the Central Statistical Board.

The initial efforts of the coordinating unit were relatively successful. However, this unit has not had the resources or the institutional authority to cope with the dramatic growth of data collection and analysis that has occurred in recent decades. In fact, its staff declined from 69 to 29 persons over the 30-year period from 1947 to 1977. The statistical policy and coordination functions today are understaffed even to meet minimal requirements and lack the institutional authority to ensure a cohesive statistical program across the government.

National policy information needs now require a system performance. A decentralized statistical system can only function as a system if it has strong overall coordination and planning. Without such direction, it cannot properly be called a system, and it cannot deal effectively with the problems that afflict a fragmented, uncoordinated collection of statistical activities. The most important of these problems today are

1. *Lack of policy relevance*—Greater analytical capacity is necessary to develop the information base for national-level policy decisions of the president, the cabinet, and Congress. Clearly established national statistical priorities are urgently needed. While the current system provides a wide variety of data, these data

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* Reprinted with minor revisions from *Statistical Reporter*, May 1980, 80-8, 197–212. A more detailed analysis of the question by the President's Reorganization Project for the Federal Statistical System can be found in "Improving the Federal Statistical System: Issues and Options," *Statistical Reporter*, February 1981, 81-5, 133–221.

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are not employed adequately for objective analyses of the complex issues that cut across present department and policy decision structures. The system has frequently failed to anticipate the need for data to be used in dealing with emerging policy problems. Failure to anticipate major data requirements leads to unnecessary conflict over the nature of problems and policy options. As a consequence, it also leads to rising political pressures on statistics and statistical agencies. Analytical capacity applied to the development of policy information needs in the Executive Office of the President should also assist in identifying national priorities for statistics.

2. *Periodic threats to integrity*—For the public to trust the data provided by the federal statistical system, it must be sure that the data are not subject to actual or perceived manipulation and that the objectivity of federal statistical data is fully protected. While the record is good, there have been occasional problems. Most important, the rapidly growing practice of using statistical data for indexing inflation and for allocating federal expenditures is greatly increasing these concerns. Systematic vigilance and stronger institutional protection are needed.

3. *Inadequate quality*—The statistics produced in small statistical units, or as a byproduct of administrative and regulatory data, are often unreliable and poorly designed for their purpose. For a variety of reasons, some beyond the control of the firms involved, the growing volume of contracted data collection and analysis are too frequently of poor statistical quality. Attention needs to be addressed to quality issues in agencies where data collection efforts are relatively small and where a "critical mass" of statistical knowhow is not available.

4. *Inadequate protection of privacy of respondents who provide statistical records*—High-quality data can be ensured only if the federal statistical system is able to promise effective protection of the confidentiality of data supplied by persons and businesses. In developing protection of confidentiality, there is also a need to reduce duplication and improve efficiency through authorized sharing of these data among federal agencies but only for statistical purposes and under carefully controlled conditions.

5. *Excessive paperwork*—Although statistical data collection accounts for only three percent of the total federal paperwork burden, this burden should be held to a minimum. Of greater significance, the methods used for reducing burden in statistical inquiries (sampling, standardization, synthetic estimates, etc.), should be aggressively applied in the collection of data by the government for administrative and regulatory purposes. This could substantially reduce the burden imposed by administrative and regulatory agencies and, at the same time, make the data more generally useful.

The highly decentralized nature of federal statistical work tends to serve rather effectively the policy needs of program agencies and departments where statistical functions are well organized and managed. However, some departments' statistical functions are not well ordered or developed. Also, the relevance of statistical work for presidential, congressional and other national-level public decision making, while substantial, is far short of both capacity and needs. Increasing the relevance of federal data for national-level policy purposes, protecting integrity, improving the quality of data, achieving more efficient utilization of the great diversity of data already produced and reducing the burden of paperwork on the public all require greater central coordination of statistical activities.

2. THE STATISTICAL REORGANIZATION PROJECT

Prior to 1977, the functions of statistical policy and coordination and of clearance of reports were performed by the Statistical Policy Division of the Office of Management and Budget (OMB). The coordination functions were transferred in October 1977 to the Department of Commerce by Reorganization Plan No. 1 of 1977 and placed in the newly created Office of Federal Statistical Policy and Standards (OFSPS). Reports clearance authority remained in OMB. OFSPS has legal authority to establish statistical policies and standards and to coordinate statistical programs under Section 103 of the Budget and Accounting Procedures Act of 1950. Its recommendations to OMB on statistical budgets and priorities are advisory, as are its recommendations regarding approval or disapproval of forms and reporting plans subject to the Federal Reports Act. These advisory roles are presently limited as a result of inadequate resources, less than effective planning mechanisms, and the perception of being too closely associated with one department's perspective.

The Statistical Policy Division grew increasingly vulnerable and was not functioning well in the OMB environment before statistical coordination and policy were transferred to the Commerce Department in 1977. The administration indicated at the time that the move was not permanent and that a final decision on statistical policy and coordination functions would be made only after a complete evaluation of statistical problems and needs by the President's Reorganization Project.

Early in the Carter administration, concerns were raised about various perceived statistical problems in federal policy making. It was soon apparent that a number of these concerns were widely shared in other parts of the executive branch, the Congress, the private sector, and in the federal statistical system and its associated disciplines and professions. It was suggested that as a part of the President's Reorganization Project, federal statistics should be examined.

In July 1977, OMB convened a conference of major public and private users and producers of federal statistics to help identify the problems of the federal system and to evaluate their relative importance. The participants in the 1977 OMB conference on federal statistical problems, the staff of the statistical reorganization project, its Advisory Committee, and virtually all, in or out of government, who reviewed the project's November 1978 "Issues and Options" paper concluded that the coordination of our decentralized federal statistical system must be strengthened markedly. It is clear that the existing unit for statistical policy, coordination, and standards, OFSPS, lacks both the institutional authority and resources to do what is needed.

It was subsequently decided that the problems were significant and warranted establishing a statistical reorganization project. The executive director for the Project, Dr. James T. Bonnen of Michigan State University, was selected in the fall of 1977 and arrived in Washington on February 1, 1978, to begin work on the project under the direction of Wayne G. Granquist, associate director for management and regulatory policy in OMB. A draft plan of work was developed and, following the president's formal announcement of the project on May 11, 1978, it was distributed widely in and out of government for review and suggested modifications.

Five project task forces were formed in June 1978 from experienced statistical agency personnel. These task forces were established to review previous analyses of major statistical issues, to evaluate the possible alternatives and to make recommendations to the project director by the end of September 1978 (see Table 1). Also in June, an Advisory Committee to the project was announced. Its eight members were experienced nongovernment users of federal statistics (see Table 2). A small, highly capable and experienced staff recruited from statistical agencies was fully in place by early September 1978.

Starting from the output of the task forces, the staff developed an "Issues and Options" paper, which defined the statistical issues and analyzed the feasibility and impact of possible alternative solutions. This paper was evaluated by the project's Advisory Committee at its second meeting on November 20–21, 1978. It was edited and 400 copies were distributed widely in and outside of government to elicit further critical review of the potential options. Following evaluation of the more than 200 responses, the project presented a revised set of options for review by the Advisory Committee at its February 16–17, 1979, meeting.

The options presented to the Advisory Committee for strengthening statistical coordination varied greatly. Some options would have centralized existing statistical agencies into one or a few organizational units.

Table 1. Federal Statistical System Project Task Forces[a]

1. *Planning and Coordination*

Joseph R. Antos, *Bureau of Labor Statistics*
Donald H. Barrowman, *Economics, Statistics, and Cooperatives Service*
Conrad Fritsch, *Economics, Statistics, and Cooperatives Service*
Paul E. Grayson, *Internal Revenue Service*
Max Shor, *Bureau of the Census*
Robert Tap, *Transportation Systems Center*
[b]Jack E. Triplett, *Bureau of Labor Statistics*
Charles A. Waite, *Bureau of Economic Analysis*

2. *Clearance and Respondent Burden*

Peter M. Cavas, *Bureau of the Census*
[b]William L. Copeland, *National Institutes of Health*
Richard J. Schrimper, *Economics, Statistics, and Cooperatives Service*

3. *Access to Data, Privacy and Confidentiality*

Lois A. Alexander, *Social Security Administration*
William Smith, Jr., *Internal Revenue Service*
Peter B. Yates, *Bureau of Labor Statistics*
[b]Paul T. Zeisset, *Bureau of the Census*

4. *Policy Relevance, Integrity and Quality of the Statistical System*

Yoshio Akiyama, *Federal Bureau of Investigation*
Charles Ardolini, *Bureau of Labor Statistics*
Norman Frumkin, *Bureau of Economic Analysis*
[b]W. Richard Johnsen, *Energy Information Administration*
Charles E. Johnson, Jr., *Bureau of the Census*
Don Luria, *Bureau of the Census*
Wes Mellow, *Bureau of Labor Statistics*

5. *Federal/State/Local Data Systems*

Paul A. Armknecht, *Bureau of Labor Statistics*
[b]Thomas R. Daugherty, *Energy Information Administration*
Dayton P. Jorgenson, *Bureau of the Census*
Lloyd E. Lyons, *Department of Housing and Urban Development*

Other Supporting Personnel

[c]W. Lorn Harvey, *Energy Information Administration*
Henrietta Hyatt, *Department of Health, Education, and Welfare*
Betty Mahoney, *Department of [illegible] Education, and Welfare*
Gary Shapiro, *Bureau of the Census*
Randy Spoeri, *Bureau of the Census*
Eleanor Stockwell, *Federal Reserve Board*
Lewis Williams, *Bureau of the Census*

[a] Affiliations as of May 1980
[b] Indicates Chairperson
[c] Assistant to Project Director for Organizational Analysis.

while others left the agencies intact and directly strengthened the authority, resources, and institutions for coordination of the system. After extensive evaluation, the project discarded centralization of the system as an excessively disruptive and costly approach.

The project then began developing its recommendations, which were discussed widely through the spring of 1979 with statistical agencies and others directly affected by the proposed changes. The authority, organization, and location of the statistical policy functions were explored at length. A Presidential Decision Memorandum was drafted and extensively reviewed in OMB before being sent by the director to the president and to other presidential advisors in the Executive Office of the President in late December 1979. The president made his decision in mid-January 1980.

3. THE SOLUTION: AN OFFICE OF STATISTICAL POLICY

The statistical reorganization project recommended, and the president approved, establishment of an Office of Statistical Policy (OSP) in the Executive Office of the President for the coordination of the federal statistical system. This office would function as a separate agency in the executive office, reporting to the president and accountable to the Congress.

The mission of the office would be to

- Ensure the policy relevance, quality, and integrity of statistical data and analyses produced by agencies of the federal statistical system;
- Develop plans so that the federal statistical system will be able to meet future information needs efficiently in the face of technological, social, and economic changes;
- Assist is minimizing the burden on all persons and organizations asked to supply statistical or other data to the federal government;
- Maintain a proper balance between protecting individual and business rights to privacy and confidentiality and meeting information needs for public policy.

The Director of the Office of Statistical Policy, with the authority and resources to carry out this mission, (1) would play a major role in identifying and responding to major information needs for national policy, (2) would serve, when necessary, as the authoritative spokesperson for the federal statistical system, and (3) would be able to make an effective attack on the problems described in Section 1.

The specific functions assigned to the Office of Statistical Policy to carry out its mission are listed here under six broad headings. For more detail see Appendix A.

Program Planning

- Fulfill a major role in coordinating planning and budgeting for federal statistical programs (Section 5 has a description of OSP's role in this area).

Table 2. Federal Statistical System Project Advisory Committee[a]

Graham T. Allison, Jr.
Dean, Kennedy School of Government
Harvard University
Cambridge, Massachusetts

Vincent P. Barabba
Director of Marketing Research
Xerox Corporation
Rochester, New York

Patrick Caddell
President, Cambridge Survey Research
Washington, D.C.

William H. Kruskal
Dean, Division of the Social Sciences
The University of Chicago
Chicago, Illinois

Richard Ruggles
Professor
Department of Economics
Yale University
New Haven, Connecticut

William H. Shaw
Consultant
Silver Spring, Maryland

Eleanor B. Sheldon
President, Social Science Research Council
New York, New York

Phyllis A. Wallace
Professor
Department of Economics
Massachusetts Institute of Technology
Cambridge, Massachusetts

[a] Affiliations as of May 1980.

- Prepare long-range plans for the adaptation of statistical programs to structural and technological changes.
- Promote effective use of administrative records and regulatory reports for statistical purposes.
- Develop legislative initiatives and review proposed legislation, regulations, and guidelines that affect federal statistical programs.

Review Clearance and Burden Control

- Perform technical review of the statistical quality of all federal data collection plans.
- Exercise delegated clearance authority for all statistical data collection plans and forms.
- Conduct research on the measurement and reduction of statistical response burden.

Analysis and Integration

- Conduct objective analyses of complex issues that involve statistical policy and require data from multiple sources.

- Coordinate the development of social and economic indicators.

User Services

- Maintain for users a central inquiry service for identifying and gaining access to appropriate federal data.
- Establish and monitor standards to ensure maximum accessibility and utility of federal statistics to all users.
- Conduct studies to improve understanding of user needs.
- Act as a focal point for receipt of, and response to, data requests from international organizations.

Statistical Standards

- Establish and monitor standards to ensure the quality, integrity, and comparability of statistics and analyses produced by agencies of the federal statistical system. Where feasible, encourage compatibility with international standards.
- Provide technical assistance in statistical methods as needed to agencies undertaking or sponsoring statistical activities.
- Promote the professional development of employees of the federal statistical system.
- Coordinate and, as needed, conduct evaluations of federal statistical agencies and their programs.

Fair Information Practices

- Carry out the functions assigned to the Director of the Office of Statistical Policy under the Confidentiality of Federal Statistical Records legislation (to be submitted to Congress) and other pertinent legislation, regulations, and guidelines.

Except as noted in the last item, these functions are currently authorized by Section 103 of the Budget and Accounting Procedures Act of 1950.

4. THE HISTORICAL EXPERIENCE IN STATISTICAL POLICY

The problems described earlier are pervasive, system-wide, and have developed over a period of more than three decades. They will not be solved through well-intentioned exhortation or by returning to earlier organizational forms. The modern capabilities of statistical policy have changed in scope and nature, are not widely understood, and have become extremely important to the most critical function of government—policy decision making.

Thirty years ago statistical policy was as essential to the quality of statistical data as it is today, but other things have changed. The varied sectors of the society and economy are much more interdependent and the federal government's role has become pervasive and of immense import. Policy decision making has become far more interactive and complex. The distinction between public and private has become blurred. As a result of this complexity, national policy decisions today are decisively dependent on quantitative measurement to identify and understand problems. Failure to provide accurate, coherent, and relevant quantitative description and analysis now results in unnecessary policy confusion and societal conflict. We are paying a growing price for our neglect of statistical policy.

Earlier institutional arrangements have grown increasingly vulnerable and are not working well. Historically, statistical policy was combined with control of paperwork burden on both public- and private-sector respondents and was located in a single unit. This unit was in OMB until 1977 and made many substantial contributions to the quality and value of federal statistics. However, the growing importance of statistical policy as a function of decision making has not been widely understood nor supported effectively. In addition, both statistical policy and paperwork functions have been overwhelmed by the more recent immense growth and changing nature of data collection and government decision making. Examination of this 30-year organizational experience suggests some institutional weaknesses and reasons for increasing vulnerability.

OMB's budgetary functions were too different and too dominant. Sound statistical policy requires long time horizons for highly technical coordination and planning, and a corresponding measure of freedom from short-run political and economic events, of whatever significance. OMB's primary function—presidential budget development and oversight—involves immediate, often crisis-driven, decisions of great political and economic significance, which dominate OMB's internal agenda and resource priorities. Statistical policy was not perceived as important in such an environment, was not understood, and slowly eroded in personnel and institutional strength.

Personnel numbers in the Statistical Policy Division of OMB declined by 60 percent in the 30 years between 1947 and 1977. This occurred despite the growing importance of statistics to the effectiveness of national policy decision making. Simultaneously, statistical policy functions were pushed downward within the OMB decision structure and consequently were removed further from the policy dialogue where national information needs are most frequently formulated. Another consequence of this trend was erosion in the authority needed to coordinate decentralized statistical programs effectively.

The resolution of the trade-offs between political or policy ends and the need to protect the integrity of statistics should not be solely an internal, perhaps lower-level, OMB decision. What is at hazard, if mistakes are made in either direction, is now too important. Resolution should occur in a context where the integrity of both the policy functions and the statistical functions are maintained by reasonably visible, broad accountability and clear lines of functional authority.

There are other reasons why the earlier institutional arrangements ultimately have not worked well.

Statistical policy now addresses many complex matters well beyond the scope of paperwork reduction. The changing nature and growing significance of statistical policy as well as the broadening scope and complexity of statistical applications over the last few decades have destroyed an earlier degree of complementarity between statistical policy and paperwork reduction. Data collected for statistical purposes once accounted for a significant part of the total paperwork burden. Today, if one includes all collections covered by the original Federal Reports Act plus all tax forms, statistics account for only three percent of the total paperwork burden. In addition, statistical data collections normally are better designed than collections for administrative purposes. Thus, the real paperwork problem and the greatest potential for future reduction of burden lies outside the statistical system.

The scope of important statistical policy applications has changed and grown more varied and complex. The traditional focus of statistical policy has been on the quality of the product produced in statistical programs and agencies and on development of the statistical potential and quality of administrative records. Most government data were once collected by federal agencies, but today a rapidly growing volume are "contracted out" to private firms. These contracted collections are of quite uneven quality and present a difficult new challenge to the application of statistical standards. The development of new statistical measurement and collection techniques has combined with new and different policy information needs to create rapidly growing areas of data collection based on direct measurement and direct observation. These areas fall outside the scope of the Federal Reports Act since no respondent-filed form is even involved, and hence reports act control associated with prior approval of forms to collect data does not even come into play. Thus, for example, the growing statistical uses of satellite sensor data, air and water pollution measurements, and many program experiments involve complex problems of statistical standards and coordination that have substantial impact on policy decisions.

As society's problems have grown more complex, statistics have become more important to effective decision making. Not only do policy makers face increasingly complex issues, but many problems now interact with one another. Policy decisions more frequently involve choices that cut across present department and policy decision structures and their data bases. Growing numbers of these crosscutting issues involve so many diverse participants that more and more executive branch decisions are being forced to the White House for resolution. Resolution of these broader policy questions often creates the need for new statistical data or requires complex new combinations of older data. These data requirements are difficult and sometimes impossible to meet under present statistical policy institutional arrangements. Yet they are essential if national policy decisions are to be based on a firm factual foundation.

Statistical policy is now a critical and fragile part of the larger policy process and is not just an input into paperwork reduction. Consequently, the functions of statistical policy and paperwork reduction do not fit together in the same organization as logically or easily as they once did.

The nature and significance of statistical policy have been transformed. Federal statistics have a far greater impact on society today. Statistics are now used in a higher proportion of economically and politically significant decisions in policy and the allocation of federal resources. In addition, with the growth of the federal government's role since World War II, the number of such decisions and their impact on society has sharply increased. As a consequence, national policy and resource allocation decisions are increasingly interactive with those of statistical policy. There is a greater need to anticipate national policy information needs through integrated planning of statistical products. The failure to coordinate the larger aspects of statistical policy with national policy making is increasingly disruptive of that policy decision process when data are missing, misinterpreted, inaccurate, or inappropriate for the decisions being made. This produces unnecessary policy conflict, which can and should be avoided.

Closer coordination of statistical policy with national policy information needs creates another institutional requirement. To remain effective, statistical standard setting, planning, and coordination must be neutral and objective in performance. Without its reputation for integrity, a statistic loses what value it has in resolving complex policy conflicts. Thus, closer coordination of statistical planning and the national policy decision process requires simultaneous strengthening of the institutional independence of statistical policy and the creation of visible accountability to protect integrity. Such accountability should be not only to the president, but to Congress, the federal statistical agencies and to the many nonfederal users who are dependent on the continued objectivity and political neutrality of statistical policy.

There is another related, rapidly growing, and potentially dangerous problem. The capacity of individual agencies to maintain statistical integrity has become questionable and the statistical system more vulnerable with every new use of statistics to index expenditures for inflation and in formulas to allocate federal funds to various beneficiaries. A very substantial part of our most important statistics is already held hostage to political ends because of their visible and direct use in politically important decisions that allocate federal resources. When the consequences that flow from those numbers are politically undesirable, the temptation to manipulate is often difficult to resist.

Program results that are highly desirable from the viewpoint of beneficiaries are sometimes created by biases that creep into statistics over long periods of time. This happens when statistical collection techniques and the concepts being measured fall behind a changing reality and no longer match that part of the real world being tracked by the numbers. Statistical revisions that are necessary to regain accuracy are then delayed or prevented by political resistance. This kind of mismatch is also often the direct consequence of the inappropriate use by policy makers of data designed for an entirely different purpose. This occurs most frequently when the statistical system has failed to anticipate major policy information needs and appropriate data are not available, as well as when policy makers act without understanding available alternatives. The data and analysis failures that follow lead all too often to situations that create temptations to adjust the data to the political goal. It is no solution, (it is not even responsible) to suggest that policy makers should not use statistics to allocate resources. The job of matching policy information needs and statistical capability must be made far more conscious and thoughtful.

The assurance of relevant, objective, and accurate statistics presents a growing and difficult problem with frightening implications for our ability to govern. Loss of either relevance or integrity destroys the value of statistics for decision making. Stronger, more visible, and more formal oversight from multiple sources is needed today, along with standards and procedural rules to protect the integrity of statistical products and processes. More systematic capacity to anticipate policy information needs is necessary. This cannot be accomplished without a stronger, more visibly independent central coordinating unit that is well coordinated with the policy decision process and simultaneously made more directly accountable well beyond the executive branch to all major users of federal statistics. This cannot be accomplished within the older institutional arrangements.

5. ELEMENTS OF AN EFFECTIVE OFFICE OF STATISTICAL POLICY

The following elements are essential for an Office of Statistical Policy to be able to resolve the statistical policy problems affecting national policy decision making:

- Adequate authority should be vested in the office.
- Institutional arrangements should exist to ensure on a continuing basis that the output of the system will be policy relevant.
- The integrity of the statistical data base, coordinated by the office, should be visibly preserved and strengthened.
- The authority of the office should be embedded within a set of functions that collectively ensure the knowledge and understanding by the office of both user needs and statistical system data problems.
- The organization should have durability.

The implication of each of these requirements is addressed below.

Authority of the Office of Statistical Policy

1. Strong coordination of budget development for statistical programs is necessary to ensure that national, as opposed to separate departmental and agency, statistical priorities are identified and prevail within a decentralized statistical system. Historically, United States statistics have generally developed from the bottom, a program at a time, to support the mission of an agency. The initial design rarely anticipates multiple uses and the department or agency normally resists spending its budget to serve the needs of users external to that mission. The growing incidence of complex, crosscutting issues assures the development of multiple use despite the department's attitude. Many external decision uses come to have high, even dominant value. As a result, the uses of the output of most statistical agencies have, over time, extended well beyond the missions of their departments. Yet there are only weak or nonexistent mechanisms to ensure that the priority data needs of this larger constituency are given adequate weight by the policy departments in which most statistical agencies are located. This is a reality that requires stronger central policy coordination if the statistics used for multiple purposes are to have acceptable levels of relevance and accuracy, indeed if they are to exist at all in some cases.

Strong statistical policy coordination will provide a system through which agencies plan more effectively, clearly establish priorities among proposals, and fully address all levels of data needs for decisions on policy and crosscutting issues in the formulation of the federal budget. The nature of this relationship and the role of the office in OMB's budget decision process were discussed with OMB by the Statistical Reorganization Project staff and an operational design developed. The Statistical Policy Coordination Committee and the Office of Federal Statistical Policy and Standards (OFSPS) have already been working on procedures recommended by the project staff. The new arrangement will balance three essential elements of the budget process as it affects statistics; it will (1) strengthen central coordination of statistical budget plans, (2) recognize the authority of OMB in resource decisions, and (3) preserve the decentralized role of program agencies in meeting their own statistical needs. For a more detailed description of the office's role, see Appendix B.

2. Within the clearance policies and paperwork budget goals set by OMB, the Office of Statistical Policy should administer the Federal Reports Act and paperwork burden budget authority for general-purpose statistics. The Federal Reports Act of 1942 authorizes the president to review all reporting plans and forms to be used in data collection by the federal government and either to permit or to prohibit that collection. Coherent national priorities in the coordina-

tion of government data collection can only be established and maintained if this authority, which has been progressively fragmented by statute since 1973, is brought back under central control. Currently proposed legislation (H.R. 6410) would achieve the objective in OMB. Executive Order No. 12174 of November 30, 1979 sets forth the president's paperwork control program. Under this executive order and the proposed legislation OMB, while retaining responsibility for policy and oversight, may delegate operational responsibility to those agencies that demonstrate the capacity to implement paperwork policy and objectives. Thus, within the clearance policies and paperwork budget goals set by OMB, the statistical reorganization project recommended that the Office of Statistical Policy administer the Federal Reports Act and burden budget authority for general-purpose statistics. The regulations implementing Executive Order No. 12174 authorize the statistical policy unit (OFSPS currently) to conduct technical reviews of all data collection plans, including those that are not for statistical purposes. Any collection program whose technical design is found to be unsound will not receive OMB approval. The authority would not only insert the office into the statistical agency planning process, but would be instrumental in reducing statistical paperwork burden and improving the quality of statistical collections.

3. Data collected for nonstatistical purposes have great statistical utility and even greater unrealized potential. This potential can often be substantially enhanced by minor changes in the forms used in the collection. Furthermore, the collection techniques involved are frequently unsound and often waste resources and impose greater than necessary paperwork burden. The statistical reorganization project recommended that agencies be required to prepare a prospective data collection plan; a technical review of such plans would be conducted by the Office of Statistical Policy as a part of a preclearance review. As already indicated, those collections found to have unsound design will not receive OMB approval. Agencies without sufficient expertise to design adequate collection plans will be assisted by the office in developing or arranging for that expertise.

4. A common statutory basis for the confidentiality of statistics must be established. Only the Census Bureau and the National Center for Health Statistics now have a statutory basis for the promise of confidentiality traditionally given respondents in statistical data collections. This ancient common law protection is increasingly threatened, especially by litigation. The only solution is a statute to protect statistical confidentiality. Individual agencies are now introducing their own legislation. If a government-wide statute is not enacted soon, the federal statistical system will be further balkanized.

The statistical reorganization project has drafted legislation that would provide uniform confidentiality safeguards throughout the statistical system, reduce duplicative collections, and make more effective use, within the federal statistical system, of data collected by individual agencies. It strengthens the confidentiality of statistical records and permits a limited exchange, for statistical purposes only, of confidential statistical records between statistical agencies. Exchanges of records are subject to the approval of a "Chief Statistician," who should be the Director of the Office of Statistical Policy. The authority to administer this legislation must be insulated from partisan political influences and be visibly and broadly accountable at the highest possible level. It should not be lodged at a low level in the executive branch or combined with nonstatistical functions.

5. The Director of the Office of Statistical Policy should be an executive level III presidential appointee confirmed by the Senate. This provides the authority appropriate to the role of the director when representing the federal statistical system and as chair of the Council on Statistical Policy described below.

6. Adequate resources are necessary to sustain effective institutional authority. Measured against even minimal expectations of performance, the resources devoted to statistical policy and coordination over the last decade have been inadequate. To staff all functions adequately would require many times current personnel levels. This obviously cannot be achieved under present budget and economic conditions, but a modest start should be made. As the office performs and as need requires, this resource base must be expanded if statistical policy is expected to perform its necessary functions.

Ensuring the Policy Relevance of the Statistical System

The relevance of statistics to policy issues and decisions is dependent on a number of attributes, including quality, timeliness, and consistency between different data sources. In addition, statistics will not be relevant to policy concerns unless appropriate analyses are performed and there has been effective communication between policy makers and statistical planners in the development and use of the statistics. A large proportion of the substantive functions recommended to be vested in the office are designed to address all of these issues.

To ensure effective policy input into the statistical planning process and a reverse flow of information on the potentially effective uses of existing statistical capacity and to provide advice to the White House and executive office on statistical policy, the office should be located in the Executive Office of the President (EOP). In addition, the director of the office should chair a new Council on Statistical Policy, also located in the executive office. Agencies represented would include the Council of Economic Advisers, OMB, and other EOP organizations and executive branch agencies as deemed appropriate by the president. The Federal Reserve Board would be invited to be a member. The council would review the annual statistical planning guidelines to be issued by the Office of Statistical Policy and provide advice on statistical programs and priorities.

Integrity of the Office of Statistical Policy

Executive branch policy makers, legislators, and the general public must have a high level of trust in government statistics as forming the factual bases for public policy. For this reason, the organization must be impartial in its work and perceived by the public to be neutral on political policy debates about national goals and issues. That neutrality should be protected by broad accountability. Thus, the office should be sensitive to presidential direction as to program priorities, responsive to congressional oversight, and accountable to the general public and to other users of federal statistics. It should be sufficiently independent to overcome any threats to the integrity of federal statistics, including possible efforts to politicize the manner in which statistical inquiries are formulated and data are gathered, analyzed, published, or otherwise disseminated.

These ends will be most nearly achieved under the following conditions:

1. The director of the office should be appointed by the president, subject to confirmation by the Senate, from among individuals of the highest integrity, as well as outstanding professional and managerial experience and competence;
2. Senior positions within the office should be classified as career-reserved;
3. The administrative functions, including appointment of senior personnel within the office, should be made the explicit responsibility of the director; and
4. Since the federal statistical agencies provide most national statistics, and at the same time are dependent on the public for accurate responses, due consideration should be given to the needs of outside users and to the maintenance of the reputation for integrity of federal statistics. Thus, an external advisory committee on statistical priorities should be created. Members of this committee should be selected without regard to their political affiliations. Some provision also needs to be made for external, independent technical evaluation, analysis, and advice.

Relating Authority to Expertise and Knowledge

Authority without knowledge and expertise can be disruptive. Thus, the substantive functions of the office, described earlier in Section 5, serve a dual purpose: every one of them is designed to deal with specific problems of users of the statistical system, but at the same time each would involve the office in sufficient substantive activities to render its oversight effective.

Durability of Organization

The Office of Statistical Policy should not be vulnerable to short-run fluctuations in mission, staffing levels, or location, and it should not be outmoded by tomorrow's crisis or by structural or functional reorganizations of other elements of government. Therefore, the office's mission and functions should be established in legislative form (as in a reorganization plan, not an executive order) and be subject to direct congressional oversight and appropriations authority.

6. RELATIONSHIP TO CURRENT PAPERWORK LEGISLATION

Congress is considering paperwork legislation (H.R. 6410) that does many useful things. One feature of the bill that the administration strongly opposes is the return of statistical policy functions to OMB, there to be combined with paperwork reduction, ADP policies and procurement planning, and telecommunications, privacy, and records management. Combining statistical policy with this heterogeneous set of activities would be a mistake of major order. Whatever the outcome of H.R. 6410, the administration will work with the Congress to implement the president's decision to create a more effective set of statistical policy institutions, as described in Section 3.

Managing information activities more efficiently is an admirable goal, but putting all information functions in one organization in OMB does not solve the many problems involved. Statistical policy has grown to be more than just another information management activity. It has become an intimate part of the national policy process. Statistical policy now involves matters of a very different order of magnitude than most information management activities.

Putting all information-related functions in one organization may force conflict resolution, but in doing so it greatly increases the chance that such resolution will be at the expense of the integrity of the function with the least immediate political clout—which includes most of the longer-term policy planning and oversight activities. In such a mixed environment of multiple purposes, one is also unlikely to attract and hold the necessary cadre of top quality statistical professionals. Statistical policy would again be slowly squeezed out by competing functions that command more immediate attention due to their greater short-run economic impacts (e.g., ADP budgets) and political significance (e.g., paperwork). The consequent losses would fall more directly on the legislative and executive decision makers than on the statistical system itself. The mere production of statistics will thrive even if there are failures to harness its output more effectively for guiding policy.

7. CONCLUSION

In the very public and open process used to consider various means for improving the design of statistical policy institutions, the independent or separate agency option has been repeatedly recommended as the most effective design by a wide range of different groups and individuals. Most of these have not been self-serving requests for separate treatment but recommendations for strengthening the capacity of statistical outputs to illuminate societal problems before decisions are made or laws enacted.

The earliest evaluation of location options came from the more than 200 responses to the project's "Issues and Options" paper, which were received from statistical and policy agencies and individuals in the government and from individuals and organizations in business, labor, universities, the professional organizations, and foundations. The independent agency option was recommended to the project by well over three-quarters of those who evaluated the location options. The separate agency option was strongly recommended by the eight-person Advisory Committee to the Federal Statistical System Reorganization Project, a committee of distinguished and knowledgeable nongovernmental users of federal statistics. The Statistical Policy Coordination Committee, composed of representatives from all departments and several independent agencies, also expressed equally strong support for the separate agency while expressing reservations about or opposing the other options.

In addition to the separate agency option, several other alternatives were seriously considered. These included returning statistical policy to OMB, strengthening the arrangements in the Commerce Department, and establishing the Office of Statistical Policy as a unit in the General Services Administration, or alternatively in the Administrative Conference of the United States. These were all viewed as seriously flawed. The limitations of the OMB location have been discussed.

Strengthening present arrangements in the Commerce Department is flawed by several difficulties. There are many inherent conflicts when one department attempts to coordinate the statistical programs of other departments and agencies. In addition, a government-wide statistical policy mission, while transcending the Commerce Department's mission, would in many diverse ways be subject to the policies of the Commerce Department. This problem would periodically undermine statistical policy processes and limit the authority and credibility of the coordinating unit. This is inherent and would be the case in any department.

The option of establishing the Office of Statistical Policy in the General Services Administration (GSA) is flawed by isolation from the executive office environment where national policy information needs can best be perceived and by the vast difference in the functions of GSA and the Office of Statistical Policy. It was doubted that statistical policy would be understood or well supported in a housekeeping agency. The Administrative Conference of the United States, a small independent agency, was also perceived as having the same flaws as well as raising serious questions about the ability to protect the integrity of statistical policy if, as in some proposed versions, it was responsible for certain regulatory-policy oversight activities.

The Office of Management and Budget recommended to the president and his advisors the creation of a separate Office of Statistical Policy located in the executive office. Despite the obvious disadvantage of adding personnel and a new agency to the Executive Office of the President, it is the superior option because it allows this function of the modern policy process to operate far more effectively than does any other option. Other presidential advisors came to the same conclusion. This is the option the president chose.

Today we know very well what statistical policy involves, how to make its activities operational, and how to judge its performance. We have more than 40 years' experience in statistical policy, a function that has as its knowledge base a mature, scientific discipline, statistics. With appropriate authority, institutions, and resources, we can do it now and do it well.

We should not mix fragilely balanced institutions with inchoate activities. Many other information functions involve a mixture of activities that are only now being developed, knowledge areas that are not yet a mature basis for action, and skills that are vastly different from statistics. Quite different goals and areas of application are embraced. Many of these functions are in a developmental stage. Some information activities have greater political or economic impact in the short run and hold a potential for distorting and destroying longer-run coordination and planning activities such as statistical policy. Statistical policy today has too great and pervasive an impact on our capacity to illuminate societal problems and to act on critical choices to allow that to happen.

We have within reach a quantum improvement in the institutions of statistical policy. We should grasp that opportunity now.

APPENDIX A: FUNCTIONS OF THE OFFICE OF STATISTICAL POLICY

This Appendix provides a more detailed description of the functions of the Office of Statistical Policy (OSP) outlined in Section 3. Based on preliminary considerations of a suitable organizational structure for the OSP, individual functions might be grouped by functional areas under five associate directors and one special assistant to the director. There are, of course, other ways of organizing the same functions.

Associate Director for Program Planning

1. Direct, pursuant to the president's authority, under Section 103 of the Budget and Accounting Procedures Act of 1950, in consultation with departments and agencies, the planning of proposals for

statistical programs prior to the fiscal year for which funds would be requested, issue guidelines for the preparations of such plans, and make recommendations with respect to such plans to the OMB.

2. Undertake intermediate and long-range planning to ensure the responsiveness of the federal statistical system to changes in technology, social values, and social and economic structures. Encourage and coordinate intermediate and long-range planning by federal statistical agencies including the appropriate relative allocation of effort and resources (1) among data collection, data compilation, and data analysis, and (2) among different modes of data collection.

3. Reduce paperwork burden by promoting the effective use of administrative and regulatory records for statistical purposes. Develop plans for and assign responsibility for the creation and maintenance of general and multipurpose sample data systems based on administrative records. Take appropriate steps to improve access to administrative and regulatory reports for statistical purposes. Recommend modification of report forms to enhance their value for statistical purposes. Review all proposed federal-state-local cooperative statistical activities.

4. Provide a legislative review and reference service for the federal statistical system. Monitor and review all proposed legislation, regulations and guidelines that affect federal statistical activities. Insure that statistical agencies are informed of proposals that affect them, and coordinate agency responses and comments. As necessary, develop and submit to OMB proposed legislation on matters of general concern to the federal statistical system.

5. Act as executive secretariat for the president's Council on Statistical Policy.

Associate Director for Review and Burden Control

6. Administer the president's authority under the Federal Reports Act for the clearance functions of the Act as they apply to data collections for statistical purposes, including all censuses and statistical surveys and data collections conducted in support of program evaluation activities and program experiments, or to produce statistical information for program managers; perform a technical review of any data collection plans (including nonstatistical) subject to the Federal Reports Act that the director of the OSP may select for such review; perform a technical review of any plans for data retrieval by direct measurement or observation that the director of the OSP may select for such review; and make recommendations or provide waivers regarding such plans as deemed appropriate. Undertake methodological research to develop improved procedures for quantitative measurement of response burden and innovative methods of controlling and reducing burden. Arrange for technical assistance where statistical techniques can contribute to the reduction of response burden resulting from nonstatistical data collection activities.

Associate Director for Analysis and Integration

7. Establish and maintain applied analytical capacity in the Office of Statistical Policy to do objective analyses of system-wide crosscutting and structural issues to coordinate the development and improvement of economic, social, and other models, and to identify problems of quality, redundance, gaps, and inconsistencies and other weaknesses of data sources. Encourage the establishment of analytical units in the departments to provide more effective linkage between policy makers and the producers of statistics for the purpose of improving communication on information needs and data services.

8. Coordinate the development of economic and social indicators.

Associate Director for User Services

9. Establish a central inquiry service for users with a limited knowledge of federal data sources. Establish and monitor guidelines and standards for the dissemination of data by federal statistical agencies through publication, release of public use files, and other means, with special attention to matters such as format and documentation of files, advance announcement and scheduling of releases, and pricing policies. Establish and monitor the operation of a federal statistical data bank of aggregates. In cooperation with the Secretary of State, arrange for and review responses to requests for statistical information from intergovernmental organizations.

10. In order to develop a better understanding of the kinds and quality of data needed by users, undertake user studies and encourage studies by statistical agencies, including both user surveys and in-depth case studies, of how federal statistics are used in specific areas of public policy. Conduct seminars and training courses, either centrally or through statistical agencies, to help potential users make more effective use of the products of the federal statistical system.

Associate Director for Statistical Standards

11. In cooperation with the Office of Personnel Management, promote the professional development of personnel in statistical agencies and units through appropriate uses of training, classification standards, and incentives. Using existing registers of statistical agency personnel, if available, or a special register established for the purpose, encourage temporary assignments for training purposes and mobility between different data-producing agencies, analytical units, and the Office of Statistical Policy. Advise on appointments to senior positions in statistical agencies.

12. Keep a register of all audits, evaluations, and reviews of statistical agencies and units, of their programs and activities, and of the statistical programs and activities of program agencies; recommend scheduling for such audits, evaluations, and reviews;

and have the authority and capability for performing audits, evaluations, and reviews on a selected basis.

13. Develop and monitor the observance of standards to ensure the use, when deemed appropriate, of uniform definitions and classifications for statistical purposes and to ensure that data collection and processing, analyses, and dissemination are carried out according to high professional and technical standards. Assist in the development of standard definitions and classifications that are compatible, so far as possible, with those established by intergovernmental organizations.

14. Provide or arrange for technical assistance to agencies undertaking or sponsoring statistical activities but lacking the necessary technical staff; special emphasis should be placed on assisting in the development of RFP's that procure statistical services for these agencies. Provide or arrange for technical assistance to nonstatistical data collection activities where the application of statistical techniques can reduce response burden. Maintain an information service covering data collection, processing, and analysis procedures of interest to federal statistical agencies. Organize and coordinate interagency groups to study methodological issues that are of particular importance to the performance of the federal statistical system.

Special Assistant for Fair Information Practices

15. Coordinate and monitor the policies and practices of departments and agencies with respect to the collection, maintenance, use, protection, and disclosure of individually identifiable information for statistical and research purposes in accordance with applicable statutes. To the extent consistent with law, the Director of the Office of Statistical Policy is authorized to approve, require, or prohibit the transfer of information to be used solely for statistical and research purposes, and may issue such regulations as deemed appropriate to accomplish this function.

APPENDIX B: THE ROLE OF STATISTICAL COORDINATION IN THE DEVELOPMENT OF THE FEDERAL BUDGET

A key element of the redesigned central statistical coordination function is the role and authority of the Office of Statistical Policy (OSP) with respect to the development of statistical program budgets and priorities. The specification of this role must meet three objectives: (1) provide Congress, the president, and his advisors with more coherent and relevant information by developing and implementing national-level priorities; (2) use existing coordinating mechanisms that have worked well in the past but have not been sufficiently systematic; and (3) facilitate, rather than disrupt, the existing mechanisms through which the Office of Management and Budget (OMB) develops the budget of the United States.

The existing statistical coordinating office (Office of Federal Statistical Policy and Standards, U.S. Department of Commerce) now has, and the Office of Statistical Policy would continue to exercise, the president's authority under Section 103 of the Budget and Accounting Procedures Act of 1950 to coordinate the planning and development of statistical programs. The OSP will also direct a multiyear planning process through which emerging data needs and related policy concerns are given more effective attention as a part of budget formation.

Multiyear Statistical Planning

The design of this planning process has several major features. As a part of departmental budget formation, each year the OSP would formulate statistical planning guidelines. Before going to the agencies these planning guidelines will be reviewed/revised and approved by the Council on Statistical Policy in the Executive Office of the President (EOP), composed of policy representatives of the departments plus OMB, the Council of Economic Advisors (CEA), and other executive branch and EOP organization representatives as designated by the president. Subsequently, statistical and program agencies will present to the OSP data collection plans and estimates of resource requirements for a multiyear period. Through ongoing consultations, OSP will provide guidance on the plans with respect to national information needs and priorities.

Agencies will consider this guidance as they formulate their budget proposals for statistics before submitting them to departments. Following the presentation of departmental budgets to OMB, the OSP will review these more formal submissions and provide further guidance as appropriate. The OSP will then formulate its own recommendations and discuss these with OMB budget examiners. In this phase, the OSP will assist OMB in an advisory capacity.

OSP Participation in the OMB Budget Process

As the OMB budget development process advanced, the OSP would participate in OMB budget hearings and develop analyses of statistical programs for OMB/OSP review. The OSP will prepare for a crosscut review of federal statistical program proposals in which OMB and the OSP jointly review selected statistical program or policy issues with significant budgetary implications. In the crosscut review, the OSP will present final advice from the Council on Statistical Policy. As chair of this EOP council, the Director of OSP will ensure that the council's advice constitutes department-level policy input as well as advice from representatives from other EOP units. The work of the council will be staffed by the OSP. The council will use interagency subcommittees as needed, and relate directly to or continue to use such existing units as the Economic Statistics Committee chaired by CEA.

Throughout this process, the traditional roles and authorities of OMB are unmodified; if the design is carried out systematically, the role of the OSP should facilitate the work of OMB and department budget examiners as well as provide an institutional framework to assist the OMB director in resolving any major statistical budget/policy issues.

Most of the basic elements of this process have been performed in the past, some, however, on an ad hoc basis and without an adequate institutional focus for statistical planning or staffing. Formalizing this process will result in a regular calendar of statistical program budget reviews, effective advance planning and consultation among the components of the federal statistical system, and a comprehensive review of statistical program proposals in terms of their consistency with the information and policy needs of the administration, the Congress, and data users generally.

Conclusion

Success in developing this comprehensive review depends critically on the OSP role with respect to the Council on Statistical Policy, which is designed to ensure the broadest possible perspective on the relevance and utility of federal statistics. Various other functions of the OSP will play a supportive role in this process, including the review and approval of statistical report forms and the provision of technical assistance to the smaller statistical units throughout the government.

It is equally important that the OSP staff and the OMB budget staff maintain an ongoing working relationship; this is most likely to be successful if OSP personnel, who are also serving as staff to the Council on Statistical Policy, are located in close physical proximity to OMB budget staff and if there are clear guidelines governing the relationship between OMB and the OSP.

For a tentative outline of the steps in the statistical planning and budgeting process, see the schedule of events that follows.

Statistical Planning and Budget Process

I. Multiyear Statistical Planning

October–December: 15–12 Months before OMB Director's Final Budget Decision:

1. November—EOP Council on Statistical Policy (CSP) reviews, modifies, and approves the Office of Statistical Policy (OSP) planning guidelines, which then go to the agencies and OMB.

January–June: 11–6 Months before OMB Director's Final Budget Decision:

2. January–March—Agencies develop their multiyear statistical plans and transmit them to OSP.
3. March–April—OSP reviews agency statistical plans and discusses them with OMB examiners.
4. April–May—OSP conducts spring planning discussions with agencies and provides comments on their statistical plans. OMB examiners invited to participate.

II. OMB Budget Process With OSP Participation

April–June: 8–6 Months before OMB Director's Final Budget Decision:

5. April–May—OSP participation in OMB Spring Review.
6. June—OMB budget guidelines to agencies.

July–December: 5–0 Months before OMB Director's Final Budget Decision:

7. July–September—Agencies develop their budget proposals.
8. September 15—Agency budgets due in OMB including the statistical program Exhibit 54.
9. September—OMB sends statistical agency/unit budgets and Exhibits 54's to OSP.
10. Mid-September–October—OSP participates in appropriate OMB budget hearings.
11. Mid-September–October—OSP consults with departments, statistical agencies/units and OMB budget examiners in preparing an analysis of statistical program budgets.
12. Mid-October—The above analysis is reviewed by EOP Council on Statistical Policy (CSP) in developing its recommendations on statistical priorities. These recommendations are sent to OMB and are used by OSP in developing issues for OMB Director's review.
13. Mid-October–late November—OMB Director's review of all agency budgets including statistical program issues. As needed, OSP prepares multiagency statistical crosscut with major policy issues for OMB Director's review.
14. Mid-November—As needed, OMB Director's crosscut review of statistical issues and final decision by OMB Director on statistical components of President's budget. CSP recommendations developed in step 12 and OMB mark sent to agency.
15. Late November through December—Agency appeals to OMB and to president.

[Received and revised June 1981.]

Comment

MARGARET E. MARTIN*

I am in hearty agreement with the recommendations contained in "Improving the Federal Statistical System: Report of the President's Reorganization Project for the Federal Statistical System." The report contains a needed and thoughtful analysis of the functions and importance of a central coordinating staff, while maintaining the advantages of a decentralized statistical system. Its analysis of the difficulties of this role in the face of the complex policy issues facing modern government is illuminating. Its recommendations for strengthening and improving the coordination function are overdue. Professor Bonnen and his colleagues are to be congratulated.

In light of my agreement, a section by section commentary would be redundant. Instead, I prefer to try my hand once again at explaining why coordination is considered such a self-evident goal to statisticians working within the government, and so puzzling to those outside. You may take my remarks with the grain of salt appropriate to the circumstance that I spent nearly 30 years on the inside, as a member of the federal government's statistical policy coordinating agency.

To coordinate in this sense means to cooperate in one or more aspects of statistical planning, design, collection, classification, or analysis. It may mean using common definitions, standard classifications, central mailing lists or sampling frames, a single survey instrument instead of two or more, or additional analysis of a data set to serve a multiplicity of uses.

COSTS OF COORDINATION

One might conclude that coordination is self-evidently a good thing and would be the responsibility of any conscientious agency. Coordination has associated costs, however. It is likely to take time and resources. It may involve compromises on question-wording, on classifications, on timing or frequency of collection, or the provision of additional, costly detail. It is difficult to explain to decision makers who are awaiting answers to their own problems and not to problems of concern to other departments that the needs of others are holding up the initiation of a survey, requiring an expensive reclassification of data, or imposing additional demands for accuracy and completeness. In addition to the efforts of individual statistical bureaus, a coordinating agency with a government-wide standing and viewpoint is needed. It is essential that such a function be carried out from the Executive Office of the President, not from within a single department. An arbitrator or umpire cannot come from the ranks of one of the teams.

Much coordination can be accomplished within single departments, of course, and the importance of coordination should be recognized at all levels of statistical planning and operation. But it is seldom that a single statistical bureau can deal adequately with even a single segment of statistical activity. Take for example the question of education. At first glance, it might appear obvious that the National Center for Education Statistics (NCES) should be responsible for all statistics from colleges and universities. A single university, for example, reports data on enrollments, degrees, faculty, and so forth to the NCES. But, if it is publicly owned, that same university should be included in the reports of the Division of Governments in the Bureau of the Census. And then there is the Bureau of Labor Statistics' monthly series on employment, hours, and earnings, collected in cooperation with state agencies, that provides estimates not only for the nation and each state but also for many metropolitan areas. Should not employment at the university be included in the estimates for its metropolitan area and state? And so it goes.

A CONTINUING PROCESS

Since coordination involves not only statistical methodology, but also judgments about uses and relative needs, the task is one of determining needs, evaluating prospective uses, and then reconciling them, as well as encouraging the application of good statistical methodology. Coordination frequently is a continuing process. A glance at the history of the Current Population Survey illustrates this never-ending process with a widely differing set of issues that have emerged, starting with the initial one raised in 1939—should this new, unproven method for collecting data be published with estimates so at variance with existing series? Through the years other questions arose: whether the reference week should be changed to match other government employment reports: whether research should be planned to explain differences among competing, apparently similar series (there was, for example, a very tough period following World War II when the numbers of persons getting unemployment insurance, swollen by returning military with extended benefits, almost exceeded the supposedly much larger group that should be reported by the CPS.) Arthur Burns, as chairman of the Council of Economic Advisors, and later as chairman of the Federal Reserve

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Board, frequently expressed a strong view that the employment estimates from the CPS household survey and the employer establishment-based reports of payroll employment should be merged in some way so that the public would not be confused by two different monthly estimates of ostensibly the same thing. Although Mr. Burns never succeeded in getting a merged estimate routinely published, he was effective in getting the two series announced to the public in a single, coordinated press release. Most recently, the Labor Department is facing the question of when and how to adopt recommendations of the Commission on Employment and Unemployment Statistics; adopting the recommendations will be better accomplished if the views of other federal agencies, representing different constituencies of users, are well-coordinated in the planning process.

BURDEN REDUCTION

The preceding examples of coordination activities have all involved data needs. Some coordination is undertaken for a different purpose, to reduce the paperwork burden on respondents, and the Bonnen report recognizes this. It is hard for those who have not been intimately connected with large-scale government surveys that are national in scope, particularly with surveys going to organizations—businesses, state and local governments, schools, and so on—to realize how frequently a single organization may be an unwilling recipient of a request for information. Large organizations that routinely fall in the 100 percent strata of samples are particularly vulnerable. If you are a General Motors, a General Electric, or an EXXON, you are bound to be caught in almost all economic surveys, no matter how small the sample.

One function of coordination in such circumstances is to attempt to reduce the burden so that the needs of more than one agency can be served from a single statistical survey. Another device is to use as far as possible administrative records that would be collected in any event to serve additional, statistical uses. Thus, for example, the establishment employment series jointly conducted by the Bureau of Labor Statistics and state agencies is a sample of establishments that would have to be much larger were it not revised (benchmarked, in governmentese) periodically on the basis of tax reports to state unemployment insurance agencies. Estimates of the gross national product and other national accounts are revised periodically from the same source, as well as from tabulations of federal business-tax returns. The Census of Manufactures has been conducted more effectively, and at lower cost, since tax returns to the Internal Revenue Service have been used as a mailing source, and the reporting burden has been reduced for very small firms by simply replacing Census of Manufactures forms by summaries of a few key items from the business tax return. Much more could be accomplished in burden reduction through coordination if there were a commonly used, single source list of business establishments available for statistical purposes from which samples could be selected, classifications controlled, and the burden of reporting rotated more equitably among firms. The idea for such a list is not new; it has been recommended over and over again by both internal and external review groups. Such a list, called the SSEL (Standard Statistical Establishment List), has been developed by the Bureau of the Census but is not yet available for use by other agencies because of statutory confidentiality provisions. The single action most likely to reduce burden would be to pass legislation developed by the Bonnen group to permit broader use of the SSEL for statistical purposes. It is to be hoped that such legislation will shortly be submitted to Congress.

ECONOMIES THROUGH COORDINATION

It is not customary to think of government statistics as an economical operation. There is too much talk of a billion-dollar census or the burden of government paperwork. Government statistical bureaus seldom point out how penny-pinching they are, except to their budget authorities. Nevertheless, if one thinks of what it would cost to run each major government survey in isolation, rather than using other sources, particularly administrative records and censuses, as a base for estimation, as a sampling frame, as a benchmark, or as a current estimator, one realizes that the cost would be appallingly greater, not just ten percent greater, but many times greater. In other words, coordination is inherent in the way in which the system has been constructed so far. The amount that now exists may be unrecognized, but continuing efforts are needed to maintain and improve the existing situation. For example, past coordination efforts have led to the incorporation of administrative statistics collected by regulatory agencies into general-purpose statistics such as the national accounts. If regulation ceases and the administrative forms are discontinued, arrangements must be made to fill essential gaps through other means.

When two agencies wish to collect similar, but not identically defined or classified information on the same subject, it is sometimes possible to satisfy the needs of each by using a building block approach. The classifications or the definitions are specified in sufficient detail so that each of the two groups, by adding up the components in a different way, can meet its own needs. For example, a common instance is the issue of teenage groupings. In the population census it is relatively easy to show individual years of age in simple one- or two-variable tabulations. For detailed cross-tabulations, some users are satisfied with the group of 15–19 year-olds, others want a break at age

16, 17, or 18. In sample surveys, satisfying each of these differing needs could be very expensive in terms of increasing the necessary sample size. This relatively simple example shows why coordination can be much more difficult when funds are tight rather than loose. It was my experience over the years that statistical agencies were much more cooperative when budgets for statistical programs were increasing rather than decreasing. When resources are strained, building block and similar approaches that satisfy multiple users may not be feasible, and coordination will require tougher decisions on priorities.

Perhaps enough has been said to illuminate what is meant by coordination. It is to be hoped that the government's top coordination unit, now returned to the Office of Management and Budget, will be given sufficient authority and resources to accomplish the tasks so well delineated in the Bonnen report.

[*Received and revised June 1981.*]

Comment

CONRAD TAEUBER*

Authority, relevance, integrity, and durability are essentials for an effective Office of Statistical Policy as recommended by the President's Reorganization Project for the Federal Statistical System. Leaving aside the question of whether the present structure of federal statistics can properly be designated as a system, the report recommends no fundamental change in the present decentralized approach to the provision of statistics by the federal government. It concludes that if the system is to provide the needed data without placing undue burdens on the public, some major changes are needed in the functioning of the agency charged with the coordination of the collection and dissemination of statistical data and analysis.

HISTORIC PERSPECTIVE

Concern over the coordination of the federal statistical activities is nothing new. Nearly 50 years ago a private organization, The Social Science Research Council, stimulated the establishment of the Committee on Government Statistics and Information Services. It (COGSIS) surveyed the situation during the 1930's when the federal statistical services had been incapable of providing data needed for an unprecedented series of events. The Federal Reports Act of 1942 was enacted by the Congress to deal with some of the issues that had come to public attention at that time. The early implementation of the provisions of that act promised to lead to major improvements.

Looking back, it is clear that there are a number of important developments that can properly be attributed to the manner in which the coordinating office carried out its mandates. But over the years its ability to perform the needed work was eroded by reductions in the number of competent staff members and by legislative action. Neither the Congress nor the administration gave adequate recognition to the important role that statistical coordination could play. The dilution of the authority over data collection activities of federal agencies and the transfer of the coordinating office from the Office of Management and Budget to the Department of Commerce are only the most recent indicators of the reduced importance that was being assigned to the statistical policy function, which until recently was the responsibility of the Office of Federal Statistical Policy and Standards (OFSPS).

The statistical policy function returned to the Office of Management and Budget in 1981, in accordance with the provisions of the Paperwork Reduction Act of 1980. This act provides that the Director of OMB shall develop long-range plans for the improved performance of federal statistical activities and programs. The Director also is to exercise a role in the budget process; develop principles, policies, and guidelines; evaluate statistical program performances and agency compliance with Government-wide policies and standards; and perform other related duties. The staff doing this work is to become part of an office concerned with the overall issue of information policy. The statistical reorganization project recommendations, as approved by President Carter, called for an independent Office of Statistical Policy within the Executive Office of the President. Underlying that recommendation was the conviction that such a position within the executive branch is necessary if the office is to be able to carry out the functions that have been assigned to it. The growing use of statistical data as "triggers" for a variety of actions and the increased reliance on statistical data for the distribution of funds and of governmental powers and duties, increase the need for a strong statistical coordinating office. With the prospect of reduced funding and the increasing demand for data, strong leadership by the statistical coordinating office becomes all the more important.

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Statisticians and members of other professions have a stake in the functioning of the federal statistical system. In recognition of that fact, late in the 1970's, as had also happened in the 1930's, representatives of a number of professional associations expressed concern over some developments in the federal statistical service. They established a Joint Ad Hoc Committee on Government Statistics. Its report, issued in 1978, drew attention to a number of weaknesses in the present organization of federal statistics and recommended a number of corrective actions.

The committee singled out the need for more effective coordination as a high-priority item for action. In its report it stated

> It is a matter of great importance that the reorganization plan make provisions to bring the capabilities for statistical planning and coordination into realistic accord with the current volume and complexity of federal statistical activities. It is clear that even the sparest exercise of the planning and coordinating functions for such an establishment requires staff and other resources far in excess of those that were at the disposal of SPD or are now available for these functions in OMB, GAO, and the Department of Commerce. [Joint Ad Hoc Committee on Government Statistics, 1978, p. 37]

Pursuant to one of the recommendations, a Commission of Professional Associations on Federal Statistics (COPAFS) was established in 1980. Its staff is to monitor developments and facilitate actions that the associations might wish to take in relation to federal statistics.

MAINTAINING INTEGRITY OF FEDERAL STATISTICS

Politicization of the federal statistical service has long been a topic of concern and discussion. It was the concern of a committee established by the American Statistical Association and the Federal Statistics Users Conference, which reported in 1973 and noted some actions that appeared to reflect an attempt by the Administration to place some party representatives in key positions to assure greater "responsiveness" to administration needs (ASA-FSUC Joint Committee 1973; Hauser 1973). Since that time there have been some changes in Civil Service procedures that are intended to strengthen the professional character of the positions and their incumbents.

Such interference in the work of statistical agencies may no longer be the focus of attention. But there is another development that is putting great strains on the statistical agencies. That is the growing use of statistical data for administrative actions. One consequence is illustrated by the spate of lawsuits relating to the 1980 census. They reflect the great concern of users that the census data may result in losses in political power and also in funds. Representation in the Congress, in state legislatures, and in other legislative bodies is based on the census counts. Large amounts of money are moved from the federal government to state and local agencies, with population numbers as an important basis for determining the allocations to individual governmental units. The assumption that statistical results are subject to administratively determined adjustments and the willingness of judges to order the Census Bureau to make adjustments for presumed undercounts reflect a danger to the integrity of the statistical system that may become increasingly serious.

The Congress has placed significant burdens on the statistical system through its growing reliance on statistical indicators as "triggers" for action. The indexing of some wage and salary rates and of Social Security and other payments places a burden on the Consumer Price Index, because relatively small changes in the index may lead to large payments by employers and by the government. Clearly there is a need for something like a statistical impact statement when legislation incorporating statistical triggers is under consideration and for a continuing review of the impacts of changes in the techniques by which a given series of data is derived. The list of examples of such uses of statistics, which have grown gradually, could be expanded at some length. The central coordinating statistical office should be in a position to advise legislators and administrators on the limits of a given statistical series when it is to be used as a trigger. At the same time, that office should be obligated to work with the statistical agency involved to make modifications that may be needed to meet the objectives identified by the Congress. The statistical profession clearly has a stake in the outcome of the discussions among the several units of government, administrative, legislative, and judicial, on these matters.

The Committee on National Statistics of the National Academy of Sciences-National Research Council in December 1980 issued a report entitled *Estimating Population and Income for Small Areas*. In response to a request from the Bureau of the Census it had established a panel of experts to review the methods of making intercensal estimates for small areas. The General Revenue Sharing program requires current estimates of population for some 39,000 governmental units, many of which have very small populations. After careful review of the methods that are available for this purpose, the panel concluded

> The Panel recommends that the Census Bureau continue to make postcensal population estimates for all counties and for all places above a certain size. That certain size, the threshold, should be determined by a systematic evaluation of estimates against the 1980 census. The Census Bureau should not make postcensal population estimates for places with population below that threshold. [National Research Council 1980, p. 34]

The program also calls for postcensal estimates of income per capita. An examination of the data available and the methods used in the preparation of these estimates found that they are subject to errors substantially greater than those that apply to population estimates. With respect to such estimates the Panel recommended

> that the Census Bureau not make postcensal estimates of per capita money income below the county level. Serious consideration should be given to discontinuing estimates for counties as well, but a decision on this should await comparisons of the postcensal estimates with the 1980 Census. [National Research Council 1980, pp. 34–35]

The problems in relation to postcensal estimates of population and income are not isolated cases. The National Commission on Employment and Unemployment Statistics, which reported in 1979, expressed concern over small area estimates that are being made in cooperation with state offices. It concludes

> While the commission's recommendations would yield somewhat more accurate data for states and large areas, and use of these data as benchmarks for improved handbook estimates would also upgrade the more frequent state and local statistics, the commission holds no illusions about the efficacy of its recommendations in producing reliable data to satisfy the detail required by present legislation. Estimates for small areas will remain subject to large errors. . . . [National Commission on Employment and Unemployment Statistics 1979, p. 15]

The commission went on to suggest that the Congress review the allocation formulas by which federal funds are being distributed to states and local areas and noted that the congressional intent is being thwarted by the need to use formulas under which the allocations are subject to large statistical errors.

SOME NEEDED ACTIVITIES

The office recommended by the reorganization project would be expected to give major attention to the problems relating to such administrative uses of statistical data. It is also to give increased attention to maintaining a central inquiry service to aid users in identifying and gaining access to appropriate federal data. One of the characteristics of the statistical services of the United States is that a large proportion of the total output is that of the federal statistical agencies. Some major activities are being carried out through cooperative arrangements between federal and state agencies. But state and municipal agencies are the originators of a relatively small part of the total statistical output of the nation. State and local agencies are often dependent on federal data to support applications for programs involving federal funding. Private users of statistics issued by government agencies frequently encounter difficulties in locating what is needed.

The rapidly growing use of computers by private research and business groups adds another dimension to the problem of access to data, for it is often possible to provide data in more detail or in more usable form through computer tape than through the printed page. The proposed central inquiry service would facilitate access to data. A feedback of the service would be the supplying of early indications of newly developing needs resulting in an increase in the responsiveness of federal agencies to users' needs. The development of standards to ensure maximum accessibility, within the limits of laws protecting the confidentiality of individually identifiable data, is another expected gain. The ability of the office to locate duplication within the decentralized federal system would be enhanced. The service would also help to identify cases in which the use of different systems of classification makes it difficult to use data originating in different agencies.

Promoting greater accessibility to federal data cannot be allowed to impair the confidentiality of information that has been collected under pledge that confidentiality of individually identifiable information would be strictly maintained. While some data collection efforts are protected against improper disclosure through legislation, many others lack this degree of protection. The absence of uniform legislative protection hinders the exchange of information among statistical agencies for statistical purposes. There are instances of deliberate duplication of collection of data to meet the needs of two or more agencies and to enable each of the agencies concerned to meet its obligation to protect the confidentiality of the data supplied by the original respondents. If, as seems likely, there will be growing emphasis on the use of administrative data for statistical purposes, new problems in regard to confidentiality are certain to arise. This is a field that has received less attention than needed, and one that will grow in importance. Some of the judicial decisions in cases involving the 1980 census have challenged interpretations of the census law on confidentiality, which has generally been viewed as providing the strongest legislative protection.

The report of the reorganization project correctly gives attention to statistical activities of agencies that collect data only incidentally to carrying out their primary mission. Such agencies may not be in a position to include in their staffs workers with the technical expertise needed to carry on their statistical activities efficiently and under conditions that observe appropriate quality standards. Closely related are the situations in which an agency engages a contractor to perform the needed statistical activity. In both of these situations the central office should be in a position to supply technical guidance. Work done under contract has been frequently criticized as being of poor quality. Current practices and the interpretations of rules relating to the awarding of contracts and the monitoring of their fulfillment should be a continuing concern of the proposed office. Contracting for needed services may be more efficient in some situations than trying to do the work in-house, and there are private firms that do an outstanding job in fulfilling contracts for statistical jobs. But even a cursory review of a list of contracts would quickly identify instances in which the contractor and the agency would have been better served if there had been adequate technical guidance in drawing up specifications and monitoring performance. The office should be able to provide such services. As the report of the reorganization project points out,

> These contractual collections are of quite uneven quality and present new challenges to the application of statistical standards.

Improving the quality of the federal statistical product has been a primary concern of the central statistical office since it was established in the early 1940's. Two important tools were provided: 1) the review of forms designed to collect information from the public and 2) participation in the budget process. The reorganization report would preserve these tools and strengthen them. The Paperwork Reduction Act of 1980 brings back to OMB some of the forms clearance authority that had been separated by congressional action since 1973. Under the pressure of current demands and limited staff, the office has not systematically pursued one aspect of the clearance process, namely, evaluation both of the experience in the use of the cleared form and of the resulting statistics. Such evaluation could make significant contributions to the quality of federal statistics. The major statistical agencies carry on a great deal of such evaluation, but their evaluations could be made even more effective if supplemented from a point of view less constrained by immediate operating problems.

The proposal to locate the office in the Executive Office of the President has as one justification the hope that it will help to reduce the frequently voiced criticism that the statistical products are not adequately responsive to emerging needs. The director's continuing contact with the concerns of the executive office is expected to supply early warning signals of new needs for data and analysis.

The reorganization report pointed out that with the experience that has been gained since the days of the Central Statistical Board much is known about the problems that call for attention. It states that "With appropriate authority, institutions, and resources, we can do it now and do it well." Statistical policy has a great and pervasive impact on the ability to illuminate societal problems and to act on critical choices. The gains that can come from a strong central coordinating statistical office will come about only if that office is given the needed resources. They cannot be realized if the history of reduced staff and reduced authority is repeated. The report sets out the possible gains as a great improvement in the institutions of statistical policy. It does not provide an estimate of the costs involved in carrying out the recommendations. Compared to the current levels of expenditures for statistical data by the federal government, the increases needed for the office would be small.

The report suggests that the office again avail itself of the guidance that could be secured from functioning advisory committees whose members come from outside the federal agency network. Such committees could form an important link between the users of the data and the new office. The advice they give would be useful on technical issues, and would also contribute to the overriding concern in relation to organization and location of the office, which the report expressed in this form:

> The integrity of the statistical data base, coordinated by the office, should be visibly preserved and strengthened.

[*Received and revised June 1981.*]

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Comment

LINCOLN E. MOSES[*]

This report is loaded with ideas; they are grounded in experience and study; they culminate in practical recommendations that one ardently hopes will be given effect. The report does appear to have accepted a handicap in making its case, a handicap of self-restraint: no horrible examples are cited. The report would be more immediately convincing and far more readable but for this (apparent) self-denying constraint.

As it stands, then, the report is harder for the reader and rather more abstract in character than are the very concrete problems at which it is aimed. This restraint may be wise, however; any cited horrible example might give birth to a nucleus of resistance to the recommendations of the report, and negative quotations can acquire immortality in Washington and outlive the justice that they may have originally embodied.

So we have a report that is rather bare of examples in presenting the needs to which it proposes solutions. Let not the reader infer that examples would be hard to supply! The needs are real enough. Two of the five principal needs, or problems, cited by the report largely reflect a shortage of statistical expertise when they occur; these are "inadequate quality" and "excessive paperwork." The other three principal cited problems relate less to statistical expertise; rather they are individual matters of some depth: "lack of policy relevance," "periodic threats to integrity," and "inadequate protection of privacy of respondents who provide statistical records."

QUALITY

Inadequate quality must always be expected when the size of data collection programs exceeds the resources of expert statistical personnel available to design, organize, and operate the programs. Excessive paperwork is also likely to burgeon when resources of statistical personnel are insufficient. The possible symptoms of inadequacy in statistical programs are varied and painful. They include

1. Unnecessary 100% collections
2. Unused and unanalyzed collections
3. Inadequate data: causes may be (a) flawed concepts, (b) faulty definitions, instructions, or instruments, (c) bad frames
4. Inadequate documentation of published data and revisions
5. Faulty methods of imputation

Three ways of addressing inadequate quality may be seen, and no one of them alone is really sufficient.

The first is to have professional statistical staff of good quality and in enough numbers. Nothing can take the place of this. My own experience of 30 months at the Energy Information Administration (EIA) provided much happy evidence of the far-reaching effects felt each time that a good professional statistician joined the staff, whether from inside government or from outside. Both leadership and training can augment the effectiveness of a cadre of strong professionals; indeed, those professionals themselves infuse leadership and training into all the work. The federal service has many willing, able, serious employees whose effectiveness in statistical programs is capable of great enhancement by the simple device of providing a sufficient leavening of technical statistical expertise.

The second way to upgrade quality of a federal statistical program is to arrange for external review, pervasively and throughout. In part, congressional oversight helps meet that need. But additionally a program can benefit immensely from regular recourse to a technical advisory committee. The Bureau of the Census has known this and turned to statistical advisory committees for more than 60 years. Other statistical agencies do the same. More recently, EIA has benefited from regular interaction with the ASA Ad Hoc Committee on Energy Statistics. Still more recently, the Nuclear Regulatory Commission has turned to a similar arrangement on behalf of its statistical work.

The third way to improve quality is to provide continuous, competent support and oversight from a central focus. This is the proposal of the report: establish in the Executive Office of the President an Office of Statistical Policy (OSP) to coordinate the federal statistical system. The functions to be conducted include many that would likely help any agency trying to upgrade its statistical output. Some of these are program planning, *for* the whole Federal statistical system, but *with* each component part; technical review; research; clearance of new collections; development of standards; and providing technical methodological assistance. These are not the only functions proposed for the OSP, but these clearly will make it directly helpful to other agencies. So, on occasion, will their review of proposed legislation affecting Federal statistical programs.

TECHNICAL ASSISTANCE

Some remarks concerning the efficacy of technical assistance are in order. To be helpful it must be timely. If interaction with OSP comes to involve troublesome delays in agency work, that will tend to undercut cooperation—and thus undermine vital interaction—with OSP. This fact calls for placing adequate resources in OSP and it also means that OSP must measure its assumption of responsibilities carefully, not taking on more than it can expeditiously achieve, especially at the outset. A program of technical assistance cannot escape the fact that it is difficult to improve an organization or its work from the outside. The energies and aspirations of those on the inside must be marshaled. The consequence is that a consultative mode of operation is necessary and that not much reliance should be placed on control, sanctions, and the like. Both these considerations, the need not to become a bottleneck or roadblock and the necessity to proceed in the slow, but productive, consultative mode, point to the danger that OSP may become overloaded. Thus, the report is right to call for adequate resources.

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There is a third comment about the efficacy of technical assistance. The report points to small agencies as being especially liable to problems with statistical quality. That is surely plausible, considering the likelihood of inadequate expert statistical staff. The same phenomenon can and does occur within a large agency, where small statistical shops are associated with several separately directed components of the large agency. The same arguments that favor a central OSP favor a central statistical group (replacing several separate small ones) in any executive department or large agency. The Department of Justice, which recently consolidated its statistics, provides a heartening example. Such centralization would make the work of OSP both easier and more effective. Presumably just such considerations underlie the efforts of OMB to have in each department a single channel through which forms clearance matters are handled.

The report identifies three large problems, other than inadequate quality and excessive paperwork, to which this commentary will now turn.

POLICY RELEVANCE

The report cogently points to the importance of assuring that the federal statistical system provide information that is relevant to the development of policy. This is a hard task; in part, it calls for guessing what sorts of information should be available in the future to address issues that will become salient. Hard as the task is, its prospects are even dimmer if no one is in charge of the job. The centrally situated OSP is a good place to assign such responsibility.

INTEGRITY OF STATISTICS

The report justly gives great weight to the need for the integrity, and perception of the integrity, of federal statistics. The statutorily established, centrally situated, OSP is a good way of supplying "systematic vigilance and stronger institutional protection." EIA's experience bears on this issue. The state of energy statistics was publicly so lowly esteemed in the aftermath of the Oil Embargo of 1973–74 that the EIA was established in 1977 with strong data collection authorities and great statutory independence to enable it to produce statistics that were not reasonably to be suspected of serving anyone's political interest. (Section 205(d) of PL 95-91 provided that "The Administrator shall not be required to obtain the approval of any other officer or employee of the Department [of Energy] in connection with the collection or analysis of any information; nor shall the Administrator be required, prior to publication, to obtain the approval of any other officer or employee of the United States with respect to the substance of any statistical or forecasting technical reports which he has prepared in accordance with law.")

In its first three years EIA almost never had to assert these prerogatives. It is worth remarking and a bit ironical that the two instances in which the EIA's independence did become salient both concerned sets of forecasts rather than statistics. (Many kinds of energy policy initiatives can take effect only slowly, so that comparison among forecasts is often a natural way to assess probable policy outcomes.) On both occasions the consequences of independent reporting were not injurious, though accompanied with commotion and tension. For such a modest price (two isolated instances), all participants gained freedom from bickering over the bona fides of the numbers underlying the description of the energy situation over a period of years. We may hope that larger infusions of statutory independence into federal statistics may increase public trust and allow political concern to address political questions rather than statistical ones.

PROTECTION OF PRIVACY

The last problem area named in the report is "inadequate protection of privacy of respondents who provide statistical records." The solution to these problems is apparently embodied in legislation drafted by the statistical reorganization project; administering the legislation would be a responsibility vested in OSP. The central location and high placement of the organization should equip it well for this sensitive and important responsibility.

More generally, placement of OSP near the center of government is a wise provision: communication across the whole federal establishment is facilitated, and the location is favorable for initiating change. Statutory establishment of the OSP is also a wise provision; the office will have a solid basis of existence and be free from vulnerability to overt and covert challenges to its existence over the years ahead.

In summary, those whose work this report is—both project staff and Advisory Committee—are due a vote of thanks from the statistical profession, and especially, I believe, from the federal statistical profession. May the recommendation of the report come to fruition!

[Received and revised June 1981.]

Comment

JAMES T. BONNEN

Conrad Taeuber, Margaret Martin, and Lincoln Moses have done such a fine job that I can only applaud their contribution to understanding the problems of statistical coordination. As the statistical reorganization project's director, I can best help readers by commenting on the purpose of the project and on some project findings, especially those concerning changes in the nature of the problem of statistical coordination that we face today.

While reflecting on the project experience recently, one of the former staff, Theodore Clemence, pointed out that this was the first major evaluation of federal statistics as a system and the first done primarily by professionals from within statistical agencies. This explains some of the differences in perception from other evaluations, as well as the different texture of much of the analysis. As project director, I insisted on and obtained superb quality staff. What intellectual distinction the output of the project attained is due to their experience, professionalism, and ability. Clemence also remarked on the unusual freedom that the Associate Director of the Office of Management and Budget, Wayne Granquist, gave the project in developing its ideas and recommendations.

The project had its origin in an interesting event early in 1977. During the presidential campaign in the late summer and fall of 1976, the monthly unemployment statistics showed a pronounced jump upward, providing the then presidential candidate Jimmy Carter with a telling issue. Following the election in November, the Carter team began developing an initial policy posture that placed a major emphasis on reversing the unemployment trend. Then in February a new seasonal adjustment formula, long under development, was routinely introduced. The newly revised unemployment statistics for late 1976 were lower and exhibited no trend after July. The January 1977 number showed a sharp decline that continued through 1977. Some in the new administration were disconcerted and suddenly aware that the things statisticians do affect policy.

Suspicious and concerned, they turned to Patrick Caddell, the president's pollster, who welcomed them to the wonderful world of numbers. He warned them that there were far more important statistical problems that would plague policy decision if national policy information needs were not well coordinated with statistical product planning, policies, and standards setting. Subsequently, Wayne Granquist, Patrick Caddell, and Vincent Barabba, former director of the Census Bureau, developed an OMB-sponsored conference on the problems of federal statistics. Thus, the statistical reorganization project had its origins in the suspicions of a few members of a new administration who were upset, almost before they could take office, by the revision of a policy-relevant statistic.

The purpose of the project was to analyze the total or system-wide performance and problems of federal statistics. Our perception, which was widely shared, was that the issues of statistical coordination constituted the most urgent problems of the system. We did not address the problems of individual agencies or any of the technical deficiencies of particular statistics.

OUTPUT OF THE PROJECT

The Final Report of the project appears in this issue of *The American Statistician*. This, however, is not the only product of the project. In the early fall of 1978, the staff drafted an "Issues and Options" paper, which describes important system-wide statistical issues and evaluates alternative ways of approaching those issues. In addition, in late 1978 and early 1979 the project designed an omnibus confidentiality statute for the federal statistical system.

The "Issues and Options" paper was not intended to be published. It was drafted for circulation to elicit a broad cross-section of critical reviews of the ideas being discussed and the options that might be implemented. The comprehensive quality of this document and the coherence of its description of the problems faced, however, caused a number of reviewers to urge strongly that it be edited and published. This was done, finally, in the February 1981 issue of the *Statistical Reporter*, a monthly publication of the Office of Federal Statistical Policy and Standards. It was from this intellectual base that the recommendations were developed that were presented in the Final Report, which was originally published in the May 1980 issue of the *Statistical Reporter*. The Final Report and the preface and a 1980 postscript to Chapter 10 of the "Issues and Options" paper together provide a chronology of events and description of the process, as well as a few observations on why some of the more interesting events took the form that they did.

With the help of the statistical agencies, the project staff prepared draft legislation to provide a common government-wide confidentiality shield within which major statistical agency products could be integrated or shared for statistical purposes without the obstacles that presently prevent full and more rational use of statistical resources. This draft statute was formally reviewed by the agencies and cleared by OMB in 1979 for transmittal to Congress but was never sent. The 1980 Paperwork Reduction Act was then in process in the same congressional committees that would have handled the confidentiality legislation. Efforts to persuade the House committee to combine statistical policy recommendations and the confidentiality legislation with paperwork legislation failed. The committee was unwilling to schedule hearings on separate legislation. This occurred late in the last session of the 96th Congress when members were impatient to act on election-year agenda items.

The confidentiality legislation is a very sophisticated piece of drafting done by Ivan Fellegi and Thomas Jabine. Ivan Fellegi did the early research, conceptualization, and outline. Together Fellegi and Jabine developed the draft, and after Fellegi returned to Canada in February 1979 Jabine patiently nursed the project all the way through agency review and OMB clearance. This is a very substantial piece of intellectual capital that should not be lost. Some day the problems created by a decentralized system in which the legal basis for confidentiality differs from agency to agency will have to be faced directly and honestly.

STATISTICAL COORDINATION: A CHANGING ENVIRONMENT AND PROBLEM

The environment for statistical coordination today is very different from that of the 1930's and 1940's, when the first mechanisms for central coordination were created. It is different from that even of a decade ago. The Final Report tries to delineate those differences.

Decades ago formal and direct linkage between statistical policy decisions and public policy decisions and action was rare. This is no longer true. Statistical policy and public policy decisionmaking find themselves today in an embrace, the intimacy and immediacy of which are very new. This embrace is enforced by the growth of government intervention in society and the increasing interdependence of economic and social sectors, which in turn cause public policies to be more interactive and to demand more immediate decisions. The consequence is that statisticians can no longer do their quiet thing quietly; statistical formulas and price indexes are used to allocate far too many public resources today. In fiscal 1979, 20 percent of the budget, $122 billion, was allocated by statistical formulas exclusive of price indexes (Emery 1980). About 30 percent of fiscal 1981 budget expenditures are automatically indexed to the CPI or other price series (DeMilner 1981a, 1981b). Conservatively, at least half of the federal budget is now allocated using statistical formulas or price indexes. The rate at which this practice and its impact have grown is phenomenal. The use of statistical formulas to allocate the federal budget was quite limited up through the mid-1960's. In 1966 no more than 2 percent of the budget was automatically indexed (DeMilner 1981a, 1981b).

This situation of a large portion of federal budget decisions being made using statistical formulas or indexes also intensifies the problem of protecting the integrity of statistics. Because Conrad Taeuber covers this well, only a brief comment is added. Statisticians no longer have the choice of whether or not they want to be involved with policy makers. The only choice left is that of how to institutionalize this relationship—which each year becomes more intense. The project found this relationship to be informed by misunderstandings and a growing negative perception of statistical performance on the part of many policy makers. The reorganization project concluded that the way to protect the potential for objective statistical policy made in such a tension with highly political public policy decisions demanding policy-relevant data is through specific institutional safeguards. It was recommended that a central Office of Statistical Policy be established as a highly visible, independent unit in the Executive Office of the President, headed by a presidential appointee subject to confirmation by the Senate. The director should be the only political appointee in the unit. The unit should have a statutory base of authority and be accountable not just to the president, but also to Congress and through an advisory committee to outside users. High visibility and multiple accountability are the best defense for integrity in an unavoidably vulnerable situation. The unit should have access to the policy decision process not only through its role in the executive office, but through establishment of a formal subcabinet committee, which would be called the Council on Statistical Policy. The council would be chaired by the Director of the Office of Statistical Policy and be made up of the assistant secretaries for policy analysis from each of the cabinet departments and members from appropriate executive office agencies such as OMB and the Council of Economic Advisers. The council would be the primary arena for resolving major statistical policy conflicts and would establish statistical budget priorities.

However this relationship is institutionalized, it is considered important that it be done well, because the implicit threat to the integrity of statistics rises as the embrace with policy intensifies. It grows at each step at which the importance of statistics to decision increases. If there is to be a "system" or if any type of "system performance" is expected of a very decentralized set of statistical agencies, statistical policy and coordination is even more important in the face of today's problems than it was in the 1940's.

Margaret Martin's excellent analysis of the nature of and need for statistical coordination applies to all levels of a system, not just at a central point. In fact, most coordination resources historically have been embedded at lower levels. The same problems that one faces in coordinating the system as a whole are also encountered within departments and within agencies. Lincoln Moses is quite correct to observe that the focus on the functions of a central statistical office in the reorganization project's Final Report tends to obscure this. While the coordination needs at the department level were recognized, it was decided early in the project staff's deliberations that the project's focus would be limited to system-wide performance problems. In a decentralized system conscious coordination must begin at lower levels, or efforts to coordinate the system as a whole become impossibly difficult. Even many of the highly centralized statistical systems of the world have come to appreciate this.

Many in the statistical community talk about the need for clout or leverage to make the coordinating function work properly. There is, indeed, a need for a high quality staff and enough substantive functions in an Office of Statistical Policy that its staff is widely respected and its services intrinsically important to the statistical system. However, it is dangerous to extend the notion of clout too far. While bureaucratic leverage is necessary, no amount is sufficient. In fact, statistical coordination efforts that assume it is sufficient are usually self-defeating.

Lincoln Moses' instinct in discussing this is quite appropriate. It is indeed a consultative mode that should generally prevail. From limited comparisons across the statistical systems of several countries it is clear that, almost no matter what the institutional setting, good quality statistical policy and coordination are best achieved in a consensual rather than a command process. One cannot unilaterally command effective cooperation across agency lines and over time achieve a quality product. Thus, the philosophy that should guide a central Office of Statistical Policy in a decentralized system is to combine service with leadership. To the extent that the Office of Statistical Policy provides effective policy leadership and needed services to the existing statistical agencies, to analysts, and to the decision makers, its functions will be valued and supported. To the extent that it regularly attempts to achieve performance in the manner of line command, it will create resentment, noncooperation, and conflict.

There are exceptions. In specific situations a command decision may very well be needed, can be enforced and should be. The origin and legitimacy of such decisions, however, usually lie at higher levels in the policy process and are often crisis driven. The day-to-day operations of statistical policy and coordination are inherently consensual. Management of decentralized statistical systems is a very complex process. No central statistical policy office, even with adequate expertise and power, can effectively coordinate such a system unless there is a corresponding investment in statistical coordination at the departmental and agency level, and a system-wide professional commitment to improving the quality and performance of federal statistics.

In my judgment, administering statistical agencies, or for that matter any agency, is far more complex, difficult, and frustrating than it was 30 years ago. The erosion of stability and authority in public institutions, including the political parties, the executive branch, and the Congress, and the decline in the capacity to make public decisions and, most important, to make them stick, mean that the day-to-day operation of an agency is a dicey matter (Sundquist 1980). In the 1940's and 1950's a statistical agency head could measure his or her performance in terms of positive accomplishments, for example, by the innovations introduced and the resulting increases in agency capability or performance. Today these agency heads are so embattled that they must be satisfied with keeping the agency intact and in meeting deadlines. Only rarely do external events allow major innovations or increased capacity.

The hierarchical structure of government and stable political coalitions after World War II at one and the same time limited and protected agencies. There were things good and bad upon which one could depend. For at least a decade, however, institutional instability and disorder have increasingly characterized the forces that affect an agency. One is continually buffeted from one direction and then the other. The environment is being politicized by the behavior described by Sundquist and by uncertainty and a corresponding lack of accountability. The motive behind the growing use of statistics for allocating federal expenditures is not so much a respect for accurate facts as it is a flight from responsibility for political decisions. One tires of hearing academics talk about how much better managed and led statistical agencies were in the 1950's and 1960's. Agency leadership today is on its own in a stormy environment and with more cannons loose on deck than anyone else has had to face in this century. Academics and other users are in debt to such leadership for many gritty performances well beyond the call of duty.

THE ROLE OF ANALYSIS

The project turned up one rather surprising conclusion upon which it had no mandate to act. It became quite clear that it is analysis that holds a statistical system in place, makes possible most communication with decision makers about their data needs, and informs them of current statistical capability. Analysis is the glue that holds all information systems together. Yet the largest single deficiency in the structure of U.S. policy decisionmaking is a lack of analysis or at least a lack of appropriately organized and managed quantitative analysis. The presidency especially is not well served in domestic policy decisionmaking. The total investment in analysis is substantial, perhaps adequate, but individual departments and agencies have seriously underinvested in analysis, and most departments, as well as the White House, usually mismanage their analytical functions because there is so little understanding, even among analysts, of the different roles and complementary nature of different types of analysis. The project's understanding of the varieties of analysis and their roles was developed by Ronald Kutscher and Charles Waite, in Chapter 6 of the "Issues and Options" paper.

What makes appropriate management of analysis complicated is that it is a very heterogeneous set of activities serving many different purposes, ranging all the way from data analysis and data validation to objective modeling through forecasting, to policy analysis that is quite subjective and dominated by political values. All of these different types of analysis complement each other and are essential if specific policy makers and particular decisions are to be well served in any unique and current policy context. To the extent that there is quantitative understanding embedded at various levels in these different kinds of analysis and to the extent that it is interlinked intelligently by good organization and management, systematic communication is possible between the statistician and the decision maker. What makes this communication absolutely necessary, and potentially lethal in absence of appropriate analysis, is that most policy decision makers, when asked, cannot specify their information or statistical needs, and few understand the relevant capability or limitations of current statistics. It is the analyst, with continuing access to a policy maker and his or her staff, who has the greatest opportunity to translate the existing policy context and decisions into specific data collection and statistical needs and to inform policy makers of current statistical capability and limits.

WHERE THINGS STAND

A decision memorandum of January 1980 from the Director of OMB to the President offered three major options for improving statistical coordination: (1) leave coordination in the Department of Commerce but with a stronger institutional setting, (2) transfer coordination responsibility to OMB with some of the institutional safeguards proposed by the project, or (3) create a new independent executive office unit for statistical coordination and policy with all the institutional safeguards and with responsibility for administering the proposed confidentiality statute. The third option was the project's recommendation. The Director of OMB and, in supporting memoranda, the Chairman of the Council of Economic Advisers and the Director of the White House Domestic Policy Staff all supported the third or project option. The president's decision accepted the project's recommendation.

Given that creation of a new independent agency in the Executive Office of the President is widely perceived as the simpleton's solution to every problem in Washington, this unanimity of support was remarkable. It arose out of an intense but episodic ten-month debate evaluating all other alternative locations, including especially OMB. The reasons why OMB was rejected as a location, even by OMB leadership, are recorded in the project's Final Report. The process is briefly described in a postscript to Chapter 10 of the "Issues and Options" paper. The subsequently enacted Paperwork Reduction Act of 1980 and recent OMB decisions now make OMB an even less viable environment.

Following President Carter's decision, an attempt was made to persuade Congress of this, but it failed. There was too little time left before elections, the critical congressional committees had their minds on paperwork legislation that at the time was in trouble, and negotiations broke down. Thus, no effective action to implement the project's recommendations occurred or is now in prospect, although an effort has been made to transfer to the new administration some appreciation of the problems of statistical coordination and the hazards posed for statistical policy and coordination by the Paperwork Reduction Act of 1980.

This act, which became law in the final hours of the 96th Congress in December 1980, completely rewrites and greatly extends the Federal Reports Act of 1942. It creates in OMB an Office of Information and Regulatory Affairs, to which is assigned responsibility for government-wide *policy and oversight* for (1) statistical coordination and standards, (2) the paperwork budget and all clearance of forms for data collection, (3) administrative records management, (4) interagency sharing of records, (5) privacy of records, (6) acquisition and management of automatic data processing and telecommunications facilities, and (7) regulatory policy. OMB recently added an eighth activity, regulatory (benefit-cost) analysis, which is intended to support regulatory policy. The act returns to OMB all final control over forms clearance, an authority that had been progressively fragmented since 1973. The features of the Paperwork Act are summarized in the January 1980 *Statistical Reporter*.

The primary assumption of the Paperwork Act is that all the functions listed in the act are information policy activities that share a common nature and should be managed together. This is a completely untested assumption that is certain to create problems, as reported in Section VI of the Final Report, including the probable destruction of the capacity for statistical coordination and policy. The Final Report of the project explains that statistical coordination is a long-run policy and planning function that lost 44 of its 69 positions while it was located in OMB's crisis-management environment between 1947 and 1977. In the new, more complex OMB environment, the chance of successfully competing with a larger number of functions, many of which have far more immediate economic or political importance and are more central to OMB's concerns, is even lower.

In implementing the Paperwork Reduction Act, OMB has transferred back from the Commerce Department only 15 of the 26 positions in the Office of Federal Statistical Policy and Standards—the same number transferred out in 1977. These 15 positions (11 professional statisticians/analysts and 4 secretaries) are now used not only for statistical policy purposes but also to provide staff support for the regulatory activities of the OMB Office of Information and Regulatory Affairs as well as for a new and rather interesting White House project on national indicators, whose purpose is to provide a flexible, on-line capability of integrating diverse data bases for policy analysis and planning. Moreover, the apparently planned elimination of the cabinet-level Statistical Policy Coordination Committee would remove statistical coordination's one formal, government-wide policy forum. One must observe also that the Office of Information and Regulatory Affairs, as now operated in OMB, is primarily a regulatory unit directed by experienced regulatory professionals. Mixing the administration of regulatory policies with statistics has long been a prescription for erosion in the real and perceived integrity of statistical decisions. In brief, the implementation is so far short of what is needed for effective statistical coordination that one can only conclude that statistical policy and coordination will, like Alice's Cheshire-Cat, slowly fade away until all that is left is a grin.

Perhaps additional action is planned, but, unless something not now in prospect occurs soon, the new administration will have missed a rare opportunity to improve the management of a critical area of government. As the Carter White House noticed, statistics do affect policy. Furthermore, without adequate and conscious statistical policy and planning there is no way to assure that it will be possible for the administration to determine, when inevitably it needs to in a few years, whether its programs are achieving their intended results, for example in having induced increased savings and investment. They are passing that point of decision now.

[*Received and revised June 1981.*]

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Comment

JOSEPH W. DUNCAN*

The Paperwork Reduction Act of 1980, Public Law 96-511, became effective on April 1, 1981. This legislation transfers statistical policy functions from the Department of Commerce to the new Office of Information and Regulatory Affairs in the Office of Management and Budget.

In August 1981 the Statistical Policy Division was established within the Office of Information and Regulatory Affairs. The administrator of the office is James E. Miller III. Joseph W. Duncan has been named as Assistant Administrator for Statistical Policy, reporting to Thomas Hopkins, Deputy Administrator for Regulatory Analysis and Statistical Policy. He will head the Statistical Policy Division, which was established by transferring 15 of the staff members formerly with the Office of Federal Statistical Policy and Standards to the OMB unit.

The Statistical Policy Division retains all of the responsibilities that were formerly undertaken by the Office of Federal Statistical Policy and Standards. Additionally, this division has been assigned lead functions for the National Indicators System that is being initiated by White House staff. Dr. Richard Beal, Special Assistant to the President and Director, Office of Planning and Evaluation, serves as Director of the National Indicators System, and Joseph Duncan has been named Deputy Director. Since four staff positions within the Statistical Policy Division are associated with the National Indicators System, the staffing for statistical policy functions is 11 persons.

It is important to note that the combination of information policy activities within a single unit within the Office of Management and Budget is expected to make the statistical policy function both stronger and more effective than it has been in recent years. Additionally, the involvement of the Statistical Policy Division in the National Indicators System will ensure that the "policy relevance" consideration of the Bonnen report receives direct and high level attention.

Clearly, however, a number of the labor intensive activities that were recommended for the central statistical office in the Bonnen report cannot be directly undertaken in the Statistical Policy Division of OMB. Therefore, as has often been the case in the past, major statistical policy functions will continue to involve significant contributions by the major statistical agencies and others. In the months ahead, the Statistical Policy Division will evolve a greatly revised work program in comparison with past activities.

In a later issue of *The American Statistician*, an update will be presented on these new activities and functions, especially as they relate to major initiatives within the overall Office of Information and Regulatory Affairs.

[*Received and revised June 1981.*]

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Senator **Sarbanes**. I thank all of the panel. You have been very helpful. I have only a few questions.

The first is, if one proceeded on the premise that executive branch changes of the sort that you have discussed in one form or another were desirable, one would have to ask whenever in the current context, even if they were to happen, they would not be executed in a highly political, nonprofessional way.

I take it the book you have referred to makes this point about what has happened to OMB. There are some who feel that has also happened to the Council of Economic Advisers. Institutions set up, carefully, thought out, with a tradition of professionalism, have in effect been turned from their purpose, and now have a highly politicized content.

In other words, in the judgments rendered, the analysis of facts, and everything, is political. I frankly think we saw some of that earlier this morning in the exchange. So that one might say, yes these changes sound fine, but in the current climate they are liable to be counterproductive.

Accepting that provision for the moment, what can the Congress do in the current situation, assuming we want to infuse some professionalism and reinforce it?

I mean, the obvious thing is to say to the Congress, you know, restructure it. Give us a chief statistician or statistics counsel, require Senate confirmation for whatever that may be worth nowadays.

But, maybe that is not the path to go. That may, in effect, put the fox in the chicken coop even more. What can the Congress do from that side to try to improve the situation?

Do you have any thoughts on that, or am I being too apprehensive?

Mr. **Juster**. That's not a problem I have thought much about, but one thing does occur to me. In the 1960's and the 1970's, my impression is that there wasn't a lot of strong congressional staff of the sort—like the Congressional Budget Office—a nonpartisan, highly professional activity devoted to taking a careful look at budget problems in the same way that the Budget Bureau used to and OMB does now on the administration side.

It isn't obvious to me that you couldn't model something like a congressional version of statistical oversight and coordination, which has something of the flavor of what the Congressional Budget Office has accomplished on the budget side.

I know that organization reasonably well, since I'm on its advisory committee. It is a very nonpartisan, highly professional organization. Not easy to pull off, given the political tensions and pressures we are subject to. But, they have successfully done that.

Maybe there is a model there that you could think about as a way to get another perspective on statistical oversight. It may not work very well, since it is all the administrative agencies that are doing the work. It may be pretty hard for an organization up on the Hill to oversight that. I don't know how you do that. Possibly you can't.

Mr. **Jones**. It is a very difficult question you asked, without organizational changes. I think what everyone has implied in their comments, is that there is a lack of an overall version as a system.

So, perhaps the Joint Economic Committee through its staff and this hearings process, could require from the administration, a statement of what is the information system supposed to comprise.

Rather than discussing individual statistics or individual data collection issues or problems, say how does the system all tie together? What are the goals of the system? Are we filling in those goals or not?

And that is the type of recommendation I made. One of the largest gaps right now is in the international sector. No one can seriously comment that we have the information on which to base our international economic policy. That should be a glaring omission in such a comprehensive statement.

But it is an extraordinarily difficult question you asked. It is more an issue of philosophy than it is organization.

Mr. BONNEN. I would concur in what has been said.

I have thought about what Tom Juster just suggested. Could the Congress even do this? When CBO was first set up, I said, "Oh, boy," and thought Congress will have a big problem maintaining objective analytical capability. But here we are, 10 years, 11 years later, and CBO has the only credible forecasting capability in this town.

Mr. JUSTER. Weak as it is.

Mr. BONNEN. Yes. Given the problems that exist.

But, I think Sidney Jones has characterized it well. No matter what you do, you have a terrible tangle of tradeoffs. That is what we ran into in the Statistical Reorganization Project. You are saddled with somewhere between the 3d and 14th best solutions, given all of the partial goal conflicts that one has to balance. One of them is integrity, another one is professional performance, plus connection at the same time to the policy process, so that you know what the data needs are with enough lead time to do something about it. You should not have to read about it in the newspaper after the fact.

At the same time, you have to maintain the integrity and the objective capability of an analytical or statistical unit.

You are right, Senator. OMB and the Council of Economic Advisers face much the same pressures. One sees the same tensions.

Berman describes two roles that OMB has performed. One is the enforcer of the President's agenda, his current priorities. That is implicit in the budget functions that OMB performs.

But, OMB also once had a very clear second role—to take an objective, longrun view. I can remember, when you and I were on the staff of the Council of Economic Advisers, being very impressed how well Sam Hughes or Bill Carey could manage both roles in meetings with White House people. They would present the pros and cons of options to achieve some Presidental objective.

Then, after all that had been discussed, they always came back to the long view. They would say, "This President is also concerned that he pass on the Presidency to his successor as strong an institution as he received it."

And they would talk about the same set of issues from the point of view of the institutional Presidency, not the agenda of the sitting President. Both views were always communicated.

That started to erode in the Nixon administration when they went from 3 political appointees in OMB to about 14. And I don't know what that number is today. They have politicized the whole OMB structure. This evolution of OMB is described quite vividly in Berman's little volume published in 1979 by the Princeton University Press.

Senator SARBANES. Let me ask a question on international trade statistics.

Do you think our competitors are able to operate off a better data base and a more focused one in this particular area?

I know that we assert that the comprehensiveness of our satatistics is superior, and the quality can match anyone's. But I have some sense that the Japanese and the Europeans may be focusing on particular statistics which they are then able to use more effectively in trade competition.

Is there any reason to believe that?

Mr. JONES. I would doubt that they would have better structural system. Our problem, of course, is a familiar one, that information is collected slowly.

I think what they may be doing more effectively is pinpointing or focusing their efforts on specific trade policy goals, trade policy issues.

What comes to mind is the recent decision of our Government to focus more on the 301 filings, where you allege discriminatory practice. I would think that the Europeans and Japanese would probably gather the information more effectively, or more quickly for those purposes than we might. Our information system is based on monthly trade statistics using a common pattern. We don't do as well when we say, "Get me all you know about telecommunications." Or, "Get me all that you can get me on semiconductors." Something very precise like that.

But that goes right back immediately to the budgeting problem. The budgets are so restricted, I think it is a red herring to argue whether or not they went up 8 percent; or 5 percent, or were negative.

My personal experience was that you simply keep doing what you are doing now, absorbing the wage increases each year. We are not improving, as Professor Bonnen has correctly said, our methodological research, our sampling research, and our standards.

It is very unlikely, if you came as the Department of Commerce did to me about 1 year ago, and said, we want to gather up information upon which to base trade enforcement policies, my response was, give me your money, because we cannot superimpose an additional function upon the already strained capability of the information system we have.

So, I think what we are doing, we would probably do as well or better than other people, but we would not, probably, be able to get you precise information on particular issues.

Senator SARBANES. One of the points I would have pursued in the previous session, had we continued it, was Ms. Gramm's assertion or suggestion that you can develop new concepts or new definitional issues, which we need to do, and somehow that is cheaper, it comes without cost.

My perception, and Professor Bonnen touched on it, is that that is exactly where you may need additional resources. In other words, you need to continue to do what you are doing until you achieve a transition to something else. And achieving a transition, and developing the new concepts is in itself a fairly expensive business, if you are going to do it right.

Once you put it into place, then it has kind of a running life of its own.

Is that not correct?

Mr. BONNEN. Yes. And it is in that area where we have had most of the erosion. One has choices in an operating statistical agency when budgets and personnel are cut. You can discontinue a data series, or you can cut back your research program. We reduce the research program, because there are people out there who are going to yell and scream if you discontinue the series. But in the short run nobody feels the effect of the reduction in research.

And, as Mr. Juster indicates, this is a general phenomenon—it is not limited to the statistical system. There is an erosion particularly in applied R&D. And where that affects with the statistical system, it has had very substantial impacts.

Senator SARBANES. Let me ask you this question.

What can be done—and, Mr. Jones, you have talked and written about this—to make the providers of the information, who then in another incarnation are the users of the information, gain a greater appreciation of the importance of this?

You made reference to the refusal to cooperate. We were being told this morning if they do it voluntarily you have better results.

But how do you make people have a greater appreciation of the importance of statistics even for their own use, and therefore, greater willingness to join in the effort to provide the figures?

Mr. JONES. The real answer to that is, you eliminate the statistical series which they are using, and very quickly you get very strong response. For example, a senior official named Shirley Kalleck came in one day in 1972 and informed me that the Paperwork Reduction Act required us to eliminate 25 percent of our forms and reports, and asked what do I do?

I said, Shirley, it is very simple. Take those surveys most utilized by the business community and you eliminate those.

It was not more than a month before I had the funding that was necessary, and no one bothered us again.

Put crudely, the business sector has the same problem, exactly the same problem we have with free trade. The benefits of good statistics are diffused and hard to recognize. But the costs are very specific and centralized on those that provide the information.

It is perfectly natural that they are rebellious. They get a form every day from some Government agency. Here again, everything we say comes back to this coordinating concept. The user of statistics does not see the benefits unless it is for a particular market research activity that they are involved in.

I was recently visited by a group of 5,000 financial comptrollers and their accountants. Their representatives came in to see me about our foreign services survey with nonaffiliated firms. I explained to them that if we were to really run these 301 filings, where we take retaliatory action based on the allegations of discrimination, we needed information. In the final analysis you can only get statistics in one of two ways: Either the business community can give us the information, or we have to make up the statistics.

I thought that was persuasive, and within 1 week, they sent a letter to all 5,000 members asking them not to participate in the survey and to hustle OMB to reject the survey form, which was subsequently done. And that survey is now in limbo at this point.

I have to admit to some cynicism that we will never be able to educate, on a broad basis, the general public or the business community on the advisability or desirability of statistics. You really have to hit them in a very specific way by taking away those that they are not using.

In my testimony I make a rather far-out suggestion. If we really want statistics, let's make them mandatory. Then, perhaps, pay the respondents.

Ms. RICHE. As representative of the business community, I should say businesses are very rarely aware of the sorts of statistics they use. Certainly in the market research area, almost uniformly they buy those statistics from other information firms that take the Government data and add other information and process it.

I'm conducting a survey right now amongst the readers of our magazine to see how they use the census data. This is in order to provide census with how they should disseminate 1990 census data.

Ninety percent of those people think that they get that information from marketing services or other firms. They have no idea that the information that they are basing a judgment on comes from the 1980 census, I don't know how to educate them any further.

Mr. JUSTER. Let me comment briefly on two issues.

One is the voluntary issue, and the other is how do you manage to get people to recognize that they are getting benefits. I think unfortunately the answer to that was just given you by Mr. Jones.

The benefits are in principle impossible to measure. People have looked and thought hard about cost-benefit analysis. One of the recent things people have discovered is you can't apply it to data programs. You can't ask yourself what is the benefit of having information about something for a lot of highly technical reasons.

I think it is correct to say you really are not going to be able to persuade people to pay for something which they long have been accustomed to think they are going to get for free. There is no way that you can get them to recognize that they should be supportive. They are always going to be resistent because they see the costs and don't see the benefits. I'm afraid that's the way the world is.

On the voluntary side, I have a view that is not very different than the one expressed this morning, with the possible exception that it may or may not apply to statistics that came from the business community. My feeling is that the tradeoff on voluntary versus nonvoluntary is that if you do it voluntary, you lose coverage but you gain in quality.

The evidence from household surveys—this is where I know the evidence best—is very clear that if you stretch volunteerism to the point of going after people 5 times, 10 times, 15 times, eventually you get them to cooperate and they will return the survey or participate in the survey.

But the quality of the data that you get from reluctant responders is unambiguously less good than the quality of the data you get from less reluctant responders.

It would not be surprising if that were also true of the business community. So, even if you said the coverage problem is important, and you said you really have to do something besides voluntary, I think it is true that per unit of information collected, you would suffer on the quality side if you pushed the response rate up by coercive methods.

The short answer is, you can force people to respond to a survey, you can't force them to tell you the truth. They will tell you the cheapest thing there is to tell. And if that is what your data base is going to consist of, you are not going to like it.

So, I have a strong preference for voluntary on data quality grounds, not on the grounds of whether it serves the Government more appropriately or not.

Mr. **Bonnen**. One other dimension to that. That is the structure of the industry from which you are trying to retrieve the data.

In relatively atomistic industrial structures, what Professor Juster says prevails.

As you get to the other end of the spectrum of industrial structure where there are a handful of interdependent firms providing information, they are afraid they are giving their competitors information. There is often no way to get data except in a mandatory collection.

And even then, you have got to do a lot of incantations about the confidentiality of the data. There are examples where industry associations know they have been collecting poor quality data and often would rather have the Government do it because then they can trust the numbers.

So, it is very complex.

Also, the numbers collected out of highly concentrated industry are used for very different purposes than data from atomistic structures.

Senator **Sarbanes**. Mr. Jones, I take it your confidentiality point, while you, I assume, recognize it is relevant to getting the information, was more directed to the, in effect, insider trade. Unfair use of information for significant financial gain, which throws, I assume, the whole system astray.

Mr. **Jones**. Yes, sir.

Senator **Sarbanes**. Do you think we need more laws, or better enforcement of the laws that we have?

Mr. **Jones**. I can honestly say we did everything humanly possible to protect those statistics and we continue to have leaks, or credibility eroding allegations.

So, I think we have to make very specific what the penalties are. As near as I can tell, going through my legal counsel, there was really no way to nail them or to punish them.

I think we have to have fines and jail sentences. We have to impress upon our professional people and the political appointees, the seriousness of the misuse of information.

Senator **Sarbanes**. We thank the panel very much.

You have been very helpful. And your statements, as I said, will all be included.

We appreciate the obvious time and effort which was put into contributing to the committee's work. Thank you all very much. The committee stands adjourned.

[Whereupon, at 1:40 p.m., the committee adjourned, subject to the call of the Chair.]

APPENDIX

PRESS COPY
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Saturday, June 21, 6:00 AM

BETTER INFORMATION AS A TOOL FOR ECONOMIC GROWTH; A PLAN FOR IMPROVING THE NATION'S STATISTICAL INFRASTRUCTURE

A JOINT STATEMENT

BY

CONGRESSMAN DAVID R. OBEY
AND
SENATOR PAUL S. SARBANES

June 20, 1986

America's lack of information about itself has increasingly become an impediment to national economic growth. The Federal Government has failed for more than a decade to make the small investments required to update and improve our capacity to collect, organize, and disseminate accurate and relevant statistical information.

Our ability to compile accurate information has not kept pace with the changing nature of our society and the result is that decision-makers in both the public and private sector must regularly make choices based on information which is incomplete, inaccurate, or nonexistent. Whether those individuals are in business or in government, the results can cost the Nation billions. The small short-term budget savings which have been made in data collection are the ultimate in penny-wise and pound-foolish policymaking.

Examples of our underinvestment in information range from statistical programs at the Department of Agriculture, where the accuracy of crop predictions is now being questioned, to the Commerce Department where entire industries have come into being since our collection of business data has been restructured.

A review of our national data collection efforts with regard to the American labor force and American businesses would lead one to believe that we are still a society of blue collar workers primarily engaged in manufacturing. While we continue carefully to count the number of people employed in the textile industry who are engaged in sewing on snaps as opposed to those who stitch sleeves, we have no information on how many Americans now work in computer sales. We do not know how many people make a living writing software or how much they make. We have no definite information on whether the Nation's movement toward a "service economy" has helped or hurt famly income or what kinds of specific skills are required in growth industries. We don't even have detailed information on what the growth industries are or how fast they are growing.

We are putting forward today a program for updating and improving the national information infrastructure. It requires additional funding which would have to come within existing budget ceilings and at the cost of reductions in other areas of government spending. Nonetheless, we think the amounts are small relative to the critical nature of the need and the enormous impact which these data have on the economy and the budget itself.

We propose that $31.7 million of spending authority allocated under the budget resolution to the Appropriations Committee be redirected by Appropriations to provide increases above the President's request for statistical programs through the government. We are also proposing significant reorganization in many of those programs. We are providing a detailed description of the programs, the amounts, and the specific purpose for which the increased funding is to be used. We believe that there is opportunity for the Appropriations Committee to find sufficient savings in other areas of spending to fund this proposal fully for the coming fiscal year. If that proves not to be politically possible, we urge as large an increment as possible be made available for Fiscal 1987 so that at least some work on improving the quality of information can begin by this fall.

We also urge the Committee to consider the relatively small size of the funds in question when compared to the impact these statistics have on the Federal budget. Federal programs totaling more than a quarter of a trillion dollars in annual outlays are indexed to the Consumer Price Index which is developed on the basis of a variety of government data-gathering programs. Recent changes in the internal revenue code require tax brackets also be indexed to the CPI. A one-tenth of 1 percent error in the estimation of the CPI could add nearly half a billion dollars to the Federal deficit.

American industries are being seriously challenged on world markets and here at home. Many parts of the country are in serious economic decline because of our declining position in world trade. Any strategy to reinvigorate our economic competitiveness will be far less likely to succeed if it is based on faulty information. We cannot afford the current low quality of our statistical programs.

PRESS COPY
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Saturday, June 21, 6:00 AM

June 20, 1986

RECOMMENDATIONS BY CONGRESSMAN DAVE OBEY AND SENATOR PAUL SARBANES TO HOUSE AND SENATE APPROPRIATIONS COMMITTEES FOR IMPROVING THE NATION'S STATISTICAL INFRASTRUCTURE

DEPARTMENT OF COMMERCE

Bureau of the Census

ITEM #1: "Standard Statistical Establishment List"

Administration's Request: $3,937,000.

Recommendation: Add $1 million to fund the survey at $4,937,000. The list is funded in the "General Economics Statistics" line item in the Current Economic Statistics Programs of the salary and expense budget.

Comment: The SSEL is the list of all business establishments used as a sampling frame for business surveys. The Administration wants to reduce the funding for multi-establishment small businesses. These businesses are a major source of economic growth and employment in the economy and should be kept up-to-date.

ITEM #2: "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations"

Administration's Request: $1.6 million.

Recommendation: Add $400,000 to fund the report at $2 million.

Comment: This report is the only Census Bureau program that collects profit and loss information and other important business data classified by industry and size. The Administration is proposing to eliminate the data on small businesses.

ITEM #3: "Improvement of Standard Industrial Classification Code"

Administration's Request: $0.

Recommendation: Add $4 million to the Periodics Censuses and Program Budget to create an inter-agency SIC coordinating update committee and aid affected agencies in upgrading their industry data bases.

The responsibility for the implementation should be moved from the OMB Office of Information and Regulatory Affairs to the Bureau of the Census. The Bureau of the Census should establish an Inter-Agency SIC Coordinating Update Committee jointly administered by Census and the Bureau of Labor Statistics. All Federal agencies affected should serve on the Committee. This Committee should replace the existing OMB "Standard Industrial Classification Technical Committee."

Comment: The SIC is used as the general framework for coding all information about industry in the Federal Government. It has not been upgraded since 1972. Currently, there are no categories for the vast number of service industries that are a part of our economy while there is too much detail on manufacturing. OMB has published a new coding structure, but has provided no funds for agencies to implement it. Within the last two weeks, some agencies were being told by letter at the end of May that they are expected to absorb this large cost into their 1987 budget.

The Bureau of Economic Analysis

ITEM #1: "Gross National Product Data Improvement Project Report"

Administration's Request: $0 out of a budget of $11,643,000.

Recommendations: Provide BEA with $2 million in the "National Economic Accounts" to conduct a series of sensitivity studies of the GNP to changes in the input indicators. The Administration has requested $11,643. This addition will bring this line item to $13,643.

Report language should require BEA to evaluate the progress made updating the GNP input data and report to Congress on their findings. The basis of their report should be the 1977 recommendations of the "Gross National Product Data Improvement Project Report."

Comment: The initial work on this report was begun in the Ford Administration and published in 1977 by OMB. It laid out a six-year plan to improve the GNP with the last year of improvements to be finished by 1987. The Joint Economic Committee recommends that the work be continued at the Bureau of Economic Analysis which is the entity responsible for the construction of the GNP.

ITEM #2: "Statistics of Income Program Tabulations"

Administration's Request: $6,306,000 for the National Income and Product and Wealth Accounts which includes $750,000 additional for this improvement.

Recommendation: Add report language, targeting the funds to increase reporting speed.

The Administration claims that this money will accomplish two objectives: (1) increase the speed of IRS reporting to BEA and (2) increase the sample size of IRS returns that are used as the source of the information. The funding is sufficient to address only the first objective. Funding is needed for the second. However, that funding should be provided to IRS.

Comment: These funds are used cooperatively between the Bureau of Economic Analysis and IRS. There are not enough funds to accomplish all the objectives that the Administration claims will be achieved.

THE INTERNAL REVENUE SERVICE

ITEM #1: "Statistics of Income Program Tabulations"

Administration's Request: $0 out of a budget of $15.5 million for "Statistics Reporting" subaccount in the Returns Processing and Revenue Account.

Recommendation: Increase funding to $2.2 million to $19.2 million in the "Statistical Reporting" subaccount of the Returns Processing and Revenue Account of the IRS (total includes recommendation for Item #2 below). These funds will increase the IRS returns sample size which will greatly increase the reliability of the figures that BEA uses to calculate the GNP.

Comment: This program was substantially reduced in 1986. In FY 1985 it was funded at $18.9 million. In FY 1986, after Gramm-Rudman reductions, the program was funded at $14.9 million.

ITEM #2: "Upgrading Internal Revenue Service Data System"

Administration's Request: $0 out of a budget of $15.5 million for the "Statistical Reporting" subaccount in the IRS Returns Processing and Revenue Account.

Recommendation: Add $1.5 million to bring the total line item to $19.2 million for the "Statistical Reporting" subaccount in the IRS Returns Processing and Revenue Account (total includes recommendation in Item #1). Report language should require the IRS to create an Advisory Committee that will advise the agency in updating the system to permit the private sector to use the data on a reimbursement basis.

Comment: The IRS Statistics of Income Program has suffered deep reductions over the past three years. These funds will permit them to upgrade their system through increased technological aids and staff expertise.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Center for Health Statistics

ITEM #1: "Survey of Vital Statistics"

Administration's Request: $6.5 million.

Recommendation: Add $4.1 million to fund the survey at $10.6 million.

Comments: These statistics are "source" statistics for the national health system. Two objectives would be served with this funding level:

(a) States would receive their promised reimbursement of 33 percent to cover their costs for collecting the data for the Federal Government. At present, states receive less than a 25 percent reimbursement.

(b) The six needed statistics (marriage, demographic death data, medical cause of death, birth, divorce, abortion) could be collected. At present, only two of them are complete.

ITEM #2: "The Health Interview Survey"

Administration's Request: $4.4 million.

Recommendation: Add $1.0 million to fund the survey at $5.4 million to increase the sample to its full size of 54,000 and give carry-over authority.

Comments:

(a) In 1985, this annual survey sample of 54,000 was reduced to three-fourths due to budget cuts. In 1986, the sample was reduced to one-half. The Fiscal Year 1987 Presidential request remains the request at one-half of the needed sample.

(b) A full sample is needed in order to perform analysis on smaller subsets of the population. For example, it is currently very difficult for the Academy of Sciences to provide requested analysis of data to the Bureau of Labor Statistics about the effects on worker health of various types of occupations.

BUREAU OF LABOR STATISTICS
DEPARTMENT OF LABOR

ITEM #1: "Professional, Administrative, Technical, and Clerical (PATC) Survey"

Administration's Request: $7,360,000. This amount includes $2.06 million to increase the number of work places in the survey to include small business establishments, State and local governments, and more service industries. This project was begun last year, but paid by reimbursement by other Federal agencies.

Recommendations: Expansion of the PATC survey should be done as it was last year on reimbursable funds provided by executive agencies. However, the State and local government expansion should not be included in the 1987 PATC expansion. New funds should be used to create a comprehensive nationwide survey of white-collar pay and benefits which would include State and local government worker data. To begin this effort, make the amount of the request ($2.06 million and 46 positions) available in FY 1987 (with carry-over authority to FY 1988) to initiate planning, testing, and start implementation of the new survey. The new comprehensive survey will fuse the resources now used for the PATC, the proposed expansion, and the current Fringe Benefit data into a data base that could be used not only to advise the Federal Pay Agent, but also to provide data on white-collar salaries and benefits.

BLS should submit a preliminary plan on the new survey to Congress by August 1987. The plan should include major activities required to create the new survey, and the budget needed to carry out these activities.

Comment: The present PATC survey has not been used by the Federal Pay Master for eight out of nine years. The survey is our only national source of white-collar wage and benefits data. Presently, it includes data on only 20 percent of white-collar occupations. The National Wage and Benefit Survey would contribute to the national data on the service sector. This survey would replace the PATC. In 1981, the GAO recommended revision of the PATC and affirmed this recommendation again in March 1986 before Chairman Mary Rose Oakar of the House Subcommittee on Compensation and Employee Benefits.

ITEM #2: "Permanent Mass-Layoff and Plant Closing Survey"

Administration's Request: $0 and elimination of the survey.

Recommendation: $6.3 million which will restore funding to the budget for the survey and accommodate the data needs of problem states in order to survey 50 states.

Comment: In 1985 and 1986, Congress instructed BLS to implement this survey. Each year the Administration has attempted to rescind the funds.

ITEM #3: "Survey of Employment Impact of Increased Defense Spending"

Administration's Request: $0 and elimination of the survey.

Recommendation: $100,000 and restore funding for the survey.

Comment: This congressionally requested survey was eliminated in the 1986 Gramm-Rudman cuts and was not restored in the 1987 request.

ITEM #4: "Restoration of All Budget Reductions from the 1986 Level"

Administration's Request: $0.

Recommendation: $3.8 million.

Comment: The Administration's budget restored some of the funding cut in the Gramm-Rudman 1986 cuts but took corresponding cuts in other areas of the budget to pay for the restoration. These cuts came in the survey of occupations, in local area detail of employment data, and in staffing.

DEPARTMENT OF EDUCATION

Research and Statistics Department

ITEM #1: "National Center for Education Statistics"

Administration's Request: $12.1 million.

Recommendation: Add $400,000 to bring the level to $12.5 million. Report language should be added requiring that: (1) a mission statement for the Center be sent to Congress by March 1, 1987; (2) the National Academy of Sciences be funded to submit an independent analyses of the mission statement, the 1988 budget request, and an analysis of the use of funds provided in 1987; (3) in FY 1988, the President's budget include salary and expense funds in the budget for the Center; (4) by October 1, 1987, the Appropriations Committee be informed of the salary and expense money to be provided to the Center from the Department of Education; and (5) special attention be given to the upgrading of the methodological capability of the Center staff and the technological capacity needed to provide data to Congress and researchers quickly and comprehensively.

Comments:

(a) Salaries and expenses for this Center are intermingled with the general Department salary and expense budget making it difficult for congressional oversight.

(b) Funds are needed to do a major redesign and update of the major data bases. Congress needs an independent objective report on how these needs are met with the FY 1987 appropriated funds and how the 1987 funding decisions and the 1988 budget request fits the mission of the Center.

(c) The national statistical system is outdated. Necessary information is unavailable, incomplete, or not provided in a timely manner to inform policymakers about the nature and scope of the Nation's financial investment in pre-secondary and post-secondary education, to provide insight on academic achievement, or to understand the United States educational standing within an international context. Approximately 6 percent of GNP is spend on education; the vast majority of which is public dollars. Thus, it is particularly important that Congress and other public policymakers have available the data upon which to make policy decisions.

ITEM #2: "National Assessment of Educational Progress"

Administration's Request: $6.2 million.

Recommendation: Create a set-aside or a line item in the Appropriations bill to protect this important program and provide report language that directs the Center to establish a national committee to establish guidelines for the competition of this national contract and the work to upgrade the data. Report language should also specify that the program should be considered an additional part of the work of the National Center for Education Statistics.

Comment: This program provides a survey of knowledge, skills, understanding, and background characteristics of American school children. The core program costs $3.8 million. The funding level includes $2.4 million for improvements to this survey.

NATIONAL SCIENCE FOUNDATION

ITEM #1: "Federal Information Locator System"

Administration's Request: $0 out of a budget of $282,410,000.

Recommendation: Add $100,000 to the National Science Foundation, in the Biological, Behavioral and Social Sciences Account for a study from the National Academy of Sciences to determine the extent that the authorizing legislation and needs of researchers are being met with this system.

Comment: This system was established by the Paperwork Reduction Act of 1980 to be administered by the Office of Information and Regulatory Affairs of OMB. Quite surprisingly, the system was placed within the Department of Defense. The only way that other Federal agencies can use it is to do so on a reimbursable basis. There is reasonable doubt whether it is available to other researchers.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

ITEM #1: "American Housing Survey"

Administration's Request: $9.5 million out of $19.5 million in HUD Direct Policy Development and Research line item.

Recommendations:

(a) Increase funding for the survey to $12.2 million by adding $2.7 million to restore the metropolitan data base on housing. The funds should be used to (1) collect data in 66 metropolitan areas instead of 44 areas, and (2) restore the original sample size of the metropolitan samples.

(b) This program is funded in the HUD Direct Policy Development Research budget which contracts with the Census Bureau to do the work. The Appropriations Subcommittee on HUD/Independent Agencies should earmark $12.2 million out of this budget account to be used to upgrade this survey.

Comment: The erosion of this data base is making it increasingly difficult to obtain reliable subsample analysis of differing income groups, family size, and other relative comparisons.

DEPARTMENT OF AGRICULTURE

Statistical Research Service

ITEM #1: "Crop Data Improvement Project"

Administration's Request: $8,925,000 for the crop data reporting system of which $450,000 is to improve the system.

Recommendation: Add $450,000 in addition to the Administration's request to bring the funding level to $9,375,000 to permit the survey information upgrading to be completed in a timely fashion. This is $900,000 over the 1986 level.

Comment: This survey provides data on crop, livestock, produce, and dairy production. In 1985, an effort to shift the survey to a random sample basis (known in the statistical community as a "probability sample") was begun. No progress was made in 1986. The recommended funding level will permit the Statistical Research Service to complete this task in 1987 which is the original target date for completion. The $900,000 addition was the Department of Agriculture's original request to OMB and it was cut in half.

ITEM #2: "Improved Crop Reporting Board Procedures"

Administration's Request: $1,415,000 for the Crop Reporting Board of which $150,000 is over the 1986 funding level for automation and improvement of the data base.

Recommendation: $1,565,000 which is $300,000 over the 1986 funding level and twice the Administration's request for automation and improvement of the data base.

Comment: The technological capability to produce data on crop production quickly is a major problem. One of the reasons is that this system is not fully computerized. The Department requested $300,000 to begin to upgrade the system and the OMB gave them one-half of their original request. We recommend that the total Department request be granted.

Economic Research Service

ITEM #1: "Farm Costs and Returns Survey"

Administration's Request: $2.2 million is earmarked for this survey from the Economic Research Service budget request of $45,475,000.

Recommendation: Add $1.5 million, totaling $3.7 million to be earmarked for this survey. The Economic Research Service budget should be raised to accommodate the addition to $46,575,000.

Comment: The Farm Costs and Returns Survey is the only systematic source of data at the farm level on farm costs, assets, debt, and various components of a balance sheet. This survey is one of the most sophisticated new surveys available to the Agriculture economic researchers. It provides the capability of early warning of developing, but as yet unrecognized, problems. The data is available at the national and regional level but not at the state level. The recommended $1.5 million would permit state data for the largest 15 agriculture States in 1987.

July 17, 1986

STATEMENT
OF
STEPHEN E. FIENBERG
MAURICE FALK PROFESSOR OF STATISTICS AND SOCIAL SCIENCE AT
CARNEGIE MELLON UNIVERSITY
TO THE
JOINT ECONOMIC COMMITTEE OF CONGRESS

Mr. Chairman and members of the Committee, I appreciate the opportunity to comment for the record of your hearings on the quality and accuracy of federal statistics. Not only have your hearings provided a lively forum for the discussion of the coordination and evaluation of economic data, but they have also exposed serious problems with current data collection, reporting, and oversight.

In particular, while much of the two hearings has focussed on the present status of economic statistics, I think that the Congress needs to look ahead and to support research efforts that will maintain and improve the quality of economic data in years to come. A major casualty of the budget cuts of recent years in statistical agencies has been the research activities in methodological and data improvement. As the nature of economic activity in the United States changes, we must also change the quantities we focus on and the methods we use to measure them. Thus research is crucial to quality data in the future.

The perspective I bring to this problem has been strongly influenced by my work as Chairman of the Committee on National Statistics at the National Academy of Sciences. The Committee was established in 1972 as a result of a recommendation of the President's Commission on Federal Statistics, and it works to encourage appropriate use of statistical methods and to improve the statistical information on which important public decisions are based. Over the past six years, the Committee has observed the decline in emphasis on methodological research throughout the federal government, despite the recognition by the heads of most of the statistical agencies that research needs to be an integral part of statistical planning.

A list of statistical areas in need of research support would rival the lists of underfunded data series brought to your attention in the testimony of Ms. Katherine Wallman and others, and the special report prepared for the JEC by Dr. Courtenay Slater. I will offer two examples not clearly linked to specific data series: (1) research on the design, collection, processing and analysis of longitudinal survey data, and (2) research on the appropriateness of policy planning based on statistically matched data files.

LONGITUDINAL SURVEY DATA

In a recent article on wages and earnings in the New York Times ("The Average Guy Takes it on the Chin," Sunday, July 13, 1986), data from the Bureau of Labor Statistics and Commerce Department were presented to support the claim that real income of American workers has fallen since the early 1970's. Unfortunately, all of the data cited in the article were cross-sectional population aggregates, e.g. average earnings at ages 30 and 40. But such data tell us little about income changes over time for individual workers. It is quite possible for average earnings for given age groups to drop over time while the typical earnings profile for individuals show steady growth. What is needed to sort out these different perspectives are longitudinal data on income and earnings and new methodology for the analysis of such data.

Although federal statistical agencies have turned to the collection of longitudinal survey data in recent years, they have not developed the capacity to process and analyze such data. Thus the innovative information being gathered as part of the new Survey of Income and Program Participation (SIPP) cannot be effectively exploited for executive and congressional economic planning. What is needed is a coordinated research effort for the design, collection, processing, and analysis of longitudinal survey data. Such an effort would lead to improved economic information, not only from SIPP but also from such basic data sources as the Current Population Survey.

MATCHING & RECORD LINKAGE

Last year, when the President announced his proposals for changes and simplifications in the income tax laws, administration officials attempted to explain the implications of the proposed changes for groups of taxpayers and for government revenues. Most people were unaware that no government economic data source contains enough information to carry out such analyses. From where, then, did the data come?

Much is written in the popular press about the disclosure dangers associated with the linkage of individual computerized government data files. Such linked files are technically referred to as exact-matches because data for the same individuals is taken from different sources and put together using identifiers such as social security numbers, etc. While *exact matching* of government economic statistical records does occur, another form of matching, known as *statistical matching*, is often used to produce analytical files for economic policy purposes.

Statistical matching procedures are used when the cases in the two files to be matched have little or no overlap, or because variables that would allow identification of individuals are not available in one or both of the files. In statistical matching, each record from one of the data sources is matched with a record from the second source that generally does *not* represent the *same* unit, as in exact matching but does represent a similar unit. The resulting data file then consists of "fictitious" individuals but contains all the variables of interest to the policy analyst for a given problem.

The data base used to analyze proposed changes in individual and corporate tax laws was one created by statistical matching. We know little about the extent of the use of statistically matched files by government agencies and there is little research being conducted by statistical agencies on the appropriateness of conclusions being drawn from the analysis of such files.

The Committee on National Statistics at the National Academy of Sciences has been planning a study of exact and statistical matching in collaboration with the Statistics of Income Division of IRS and the Bureau of the Census. This project has been one of the casualties of recent budget cuts.

SUMMARY

I applaud the effort of the Joint Economic Committee to ensure the quality and accuracy of federal economics statistics. The specific recommendations by Committee Chairman Congressman Obey and by the Committee's ranking Senate Democrat, Senator Paul Sarbanes, if implemented by the various appropriations committees, would help reverse the decline in basic statistical data series of vital economic importance. But data of improved quality cannot be gathered without the development of better methods for the collection and analysis of economic data, and better methods depend on statistical research that needs to be carried in agencies throughout the federal government. I urge the Joint Economic Committee to give high priority to support for a reinvigorated research program in the major statistical agencies as part of its effort to improve the nation's economic data base.

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